PREVENTION '80

DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Office of Disease Prevention and Health Promotion

Prevention '80

U.S. Department of Health
and Human Services

Public Health Service
Office of Disease Prevention and Health Promotion

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Preface

"The health of the American people has never been better."

Healthy People

Progress toward better health for Americans has been substantial in recent years. Certainly the data give us cause for encouragement. Dramatic declines in the incidence of certain infectious diseases have been joined by impressive gains in infant survival, and, especially in the last decade, surprising reductions in death rates from heart disease and stroke. Our successes in preventing disease and disability in this country have led to a growing sense of optimism about the potential for future gains.

Moreover, development of our national prevention strategy to enhance the prospect of those gains has taken form over the last decade. A number of prominent milestones are notable for their contribution to the definition of priorities and objectives.

- President's Committee on Health Education, 1971
- Preventive Medicine Task Forces of the Fogarty Center and the American College of Preventive Medicine, 1975
- Department of Health, Education and Welfare Task Force on Disease Prevention and Health Promotion, 1978
- The Surgeon General's Report on Health Promotion and Disease Prevention, *Healthy People,* 1979
- *Promoting Health/Preventing Disease: Objectives for the Nation,* 1980

With the specification of the measurable goals and objectives for 1990 contained in *Healthy People* and *Objectives for the Nation,* our emerging conceptual "roadmap" offers a clear charge. The task is now to marshal the collective resources of public agencies and private organizations and businesses to achieve what is possible.

Though the objectives that have been identified are national guideposts—as distinct from Federal standards—the Federal government has considerable capability to contribute to their attainment. *Prevention '80* is offered as an annual report to describe the Federal prevention activities, review the major accomplishments of the past year, and establish a mechanism for tracking our progress. It is our hope that this report will also facilitate the efforts of health professionals and program managers engaged in similar activities in States and communities throughout the country. With a cooperative commitment of energy, imagination and will, the decade ahead can offer an exciting opportunity for even greater gains for the health of Americans.

J. Michael McGinnis, M.D.
Deputy Assistant Secretary for Health
and Assistant Surgeon General

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Chapter 1:
Prevention Highlights

Recent years have seen impressive gains for the health of Americans—gains largely accomplished through the prevention of disease and disability. In 1979, the Surgeon General released *Healthy People: The Surgeon General's Report on Health Promotion and Disease Prevention,* which chronicled the important changes in the health status of Americans since the turn of the century and outlined national goals for the future. Even in the short time since the release of the Surgeon General's Report, prominent advances have been made toward those goals.

Prevention '80 summarizes some major developments now under way in prevention and reviews the Federal contributions to achievement of our prevention objectives. This first chapter presents five particularly important achievements receiving special recognition within the last year that exemplify the potential for further advances: the eradication of smallpox, enhanced childhood immunization, the decline in infant mortality, the decline in heart disease and stroke mortality, and the hypertension detection and follow-up program.

Prevention Highlights

Smallpox Eradication

The conquest of smallpox, officially declared in May 1980 by the Assembly of the World Health Organization, was one of the most important achievements in the history of public health. In October of 1977, the last documented epidemic case of smallpox occurred in Marka, Somalia, ending a scourge that historically has been a leading cause of unnecessary death.

The United States was a major contributor to the worldwide effort directed by the World Health Organization, having provided nearly a fourth of the WHO and bilateral aid budget, as well as the services of epidemiological consultants, largely from the U.S. Public Health Service's Center for Disease Control. Smallpox is the first disease ever eliminated through a carefully designed and implemented program.

Early Asian writings indicate that smallpox was long prevalent in the more densely populated parts of Asia, and it probably reached Europe around the sixth century. Estimates vary as to the early death rate, but references taken from documents about epidemics of the 17th and 18th centuries suggest that the death rate among those who contracted smallpox was between 20 and 50 percent. From the 15th through the 18th centuries, as civilized man explored the new world, and as improved transportation and the need for commerce ended the isolation of many remote areas, smallpox epidemics followed and led to the decimation of entire populations. By the middle 1700s, smallpox in the United States was believed to account for 10 percent of all deaths, and was the leading cause of infant death.

Clues to control of the disease emerged over centuries. As early as 2,500 years ago, practitioners in China and India found that variolation—development of a light case of smallpox through deliberate inoculation with material from smallpox pustules or scabs—could confer immunity to the disease. The death rate of 1 or 2 percent from variolation was far less than the expected death rate from the natural disease.

In 1978, the English country physician Edward Jenner documented the fact that smallpox immunity could be obtained through inoculation with the much milder cowpox. His prediction that this practice would result in "the annihilation of smallpox" marked the beginning of a quest that succeeded 179 years later.

In spite of the growing wide-scale use of smallpox vaccination in the 1800s and early 1900s, the disease remained endemic throughout the world during much of this century. Those who were not immune ran a high risk of being stricken sometime during their lifetimes. Following World War II, the concept of worldwide eradication gained new supporters as smallpox was successfully eliminated from North America, Europe, and a number of other countries willing and able to vaccinate the reservoirs of nonimmune individuals in population centers, and to prohibit travelers from crossing their borders without evidence of smallpox vaccination. In 1949, the last indigenous case of smallpox in the United States occurred in the Rio Grande Valley in Texas.

To strengthen the global program, in 1959 the World Health Assembly passed a resolution directed at smallpox eradication, and the World Health Organization, UNICEF, and other organizations offered help to those countries willing to undertake mass vaccinations. However, it was not until 1966 that the commitment to worldwide eradication of smallpox was augmented with budget and bilateral assignments sufficient to make feasible the goal of eradication by 1976. In 1967 the disease was still considered endemic in 33 countries, and cases attributed to travel through

these areas had been reported in 11 other nations. By 1970 only 21 countries reported cases, and 16 did so in 1971.

The smallpox eradication program was multifaceted. Techniques of mass vaccination programs were improved, and costs decreased with the development of the jet injector gun and the bifurcated needle. Production and quality control for vaccine production were also greatly improved.

Ultimately, a highly developed surveillance/local containment program provided the measure of success. Workers systematically searched for cases and moved rapidly into any area in which a case was detected, sealing off the spread to other areas, isolating the patients, and finding and vaccinating contacts.

By 1974 the fight to eradicate smallpox was near success, with Pakistan's last case reported in 1974, Nepal's in April 1975, India's in May 1975, and the last in Bangladesh in October 1975. Ethiopia's last reported case occurred in 1976, and the last cases in Kenya and Somalia were reported in 1977. A laboratory accident in England in 1978 produced the last verified case of smallpox. The Global Commission for the Certification of Smallpox Eradication required that a two-year period pass without any naturally transmitted cases before the disease could be considered to have been eliminated. That period ended in October 1979, and the smallpox virus is now housed only in selected laboratories.

Childhood Immunization

October 1979 also marked the successful completion of the two and a half year National Childhood Immunization Initiative. This effort was begun in 1977, when surveys revealed that over a third of school-aged children were inadequately immunized against the major vaccine-preventable diseases. A goal was established to raise the immunization levels to over 90 percent by the fall of 1979, and program activities were tailored to meet that goal. Today, of the 24 million children in kindergarten through eighth grade, 91 percent are adequately immunized. Of those newly entering school in the fall of 1979, 94 percent had been immunized against measles, 93 percent against rubella, 87 percent against mumps, 93 percent against polio, and 94 percent against diphtheria, pertussis, and tetanus. Cases of these diseases have also declined in number.

In fact, remarkable progress has been made since the 1950s in the reduction of vaccine-preventable diseases throughout the United States. Only 30 years ago the childhood diseases produced extensive mortality and residual disability in this country. The 1955 Poliomyelitis Vaccine Assistance Act, later expanded by the Vaccine Assistance Act of 1962, supported extensive growth in State-level programs to provide all children with immunizations against the major childhood vaccine-preventable diseases. As more vaccines were developed and deployed, the list of diseases to be combated expanded, and the number of reported cases fell. However, as the disease incidence fell, efforts to immunize all children did not receive the priority warranted, and levels of immunity to many of these diseases among children crested and, in some cases, fell.

The nationwide Immunization Initiative announced in April 1977 was developed to ensure that the Nation's children would be immunized against seven vaccine-preventable diseases: poliomyelitis, diphtheria, pertussis (whooping cough), tetanus, measles, mumps, and rubella. Particular attention was paid to the gap in immunization levels between affluent communities and low-income areas, and in the differences between levels in school-aged children and preschoolers.

As part of the effort to achieve the goal established, the Department of Health and Human Services increased grant support to health departments for immunization activities, strengthened the emphasis on improved immunization levels for users of grant-supported primary care facilities serving low-income populations, and launched a national outreach and education effort to encourage immunization. Organized professional groups making substantial contributions to this effort included the American Academy of Pediatrics, the American Medical Association, the National Medical Association, the National League for Nursing, and the American Hospital Association. Local chapters of volunteer groups such as the National Council of Negro Women, the General Federation of Women's Clubs, the Parent-Teacher Association, and the American Red Cross contributed significantly at the community level. Business and labor organizations participated in both publicizing and implementing the objectives of the campaign.

A particularly important feature was the vigorous enforcement by school systems of school entry immunization laws, with expanded requirements to include immunizations for more diseases. For example, the number of States requiring immunization against mumps increased from two in 1977 to 18 in 1979, and five States enacted school entry immunization laws for the first time during the same period. Today all 50 States have school entry statutes to help ensure that all youngsters are protected against childhood diseases.

As a consequence of these successful efforts, the Public Health Service has reaffirmed its commitments to maintain immunization levels among all children, to eliminate measles as an endemic

disease in the United States by 1982, and to improve the reporting of childhood diseases for better tracking of the incidence of outbreaks.

Decline in Infant Mortality

In 1979, the infant mortality rate in this country continued to decline and reached the lowest point ever achieved, 13 deaths per 1,000 live births. This achievement is largely the result of advances in perinatal and neonatal medicine, improvements in the delivery of care to mothers and infants, and improved techniques for early identification and treatment of those pregnant women and infants who are at high risk.

The decline in infant mortality since 1900 has been dramatic—more than a sevenfold decline from the 1900 level of 100 deaths per 1,000 live births. During the past 10 years, the rate has decreased from 19.2 in 1968 to 12.0 in 1978 for whites and from 36.2 to 23.1 for blacks. Although these are significant improvements for both groups, there remain large differences among subgroups of the population and among geographic areas.

It is important to note that total infant mortality represents the combination of early infant deaths (neonatal) and those occurring after the first month of life and before the first birthday (postneonatal). Problems and intervention strategies differ between these two components, and improvements have occurred for both.

Neonatal deaths—those occurring in the first 28 days after birth—largely represent prenatal and perinatal circumstances and events. Consequently, family planning, prenatal care with risk assessment and management, and newborn intensive care constitute the most important measures contributing to the reductions of neonatal deaths. Since the causes of postneonatal deaths reflect aspects of the infants' environments, important preventive measures include parenting instruction for new parents, illness surveillance, and appropriate use of pediatric services.

Neonatal mortality accounts for more than two thirds of infant deaths; a substantial portion of the gains made during the past 20 years can be attributed to developments in neonatology and the establishment of regionalized networks for perinatal care. Care of high-risk pregnant women and intensive care of newborns, particularly for low birth weight infants, have improved significantly. Improved prenatal nutrition, control of certain diseases like rubella that may affect the fetus if contracted by the mother during pregnancy, and reduced substance abuse during pregnancy (smoking, alcohol, and certain drugs) may also contribute to reductions in infant death rates. If the currently successful trends in reducing neonatal deaths continue through the 1980s, future improvements in infant health may depend on our ability to prevent postneonatal problems.

A number of Federal efforts have contributed to the progress made in reducing infant deaths. The Maternal and Child Health Program, which dates back to passage of the Social Security Act in 1935, provides grants to States for maternal and infant services. The States operate comprehensive programs including crippled children's services and special projects in family planning, maternity and infant care, intensive care, school health, and dental health. The Improved Pregnancy Outcome initiative and Improved Child Health projects are further efforts initiated through the State grant program to improve the health of pregnant women and children.

Other activities include a recently authorized program to fund comprehensive services and prevention projects to deal with adolescent pregnancies, special nutrition programs administered by the Department of Agriculture for pregnant women and infants, the direct reimbursement for medical care provided under Medicaid for eligible low-income women, and the comprehensive social services covered under Title XX. Through the National Institute of Child Health and Human Development (NICHD), a multidisciplinary research effort addresses the early identification and reduction of risk factors associated with infant mortality.

The combination of these efforts with participation of State and local agencies has been a significant factor in the impressive improvements of recent years and can be expected to yield further gains in infant health in the 1980s.

Decline in Heart Disease and Stroke Mortality

In the decade from 1968 to 1978, age-adjusted death rates for heart disease declined by 22.7 percent, and stroke deaths declined by 36.5 percent. Indeed, heart disease and stroke death rates have dropped dramatically since 1950.

Although heart disease continues to be the leading cause of death and stroke the third leading cause, there have been substantial gains in the fight to prevent these chronic and disabling diseases. These trends bear important witness to the fact that certain elements of chronic diseases need not always be inevitable consequences of the aging process.

Between 1950 and 1970, the age-adjusted death rate for all heart diseases—including congestive heart failure, rheumatic and hypertension-related heart disease—fell 18 percent, or an average of one percent every year. From 1970 to 1978, the rate declined another 18 percent, or approximately 2.5 percent each year. For stroke, the 1950 to

1970 decline was 25 percent; and the 1970 to 1978 decline, an additional 33 percent. These achievements can be attributed both to improvements in treatment of individuals with these conditions and to prevention activities that reduce the incidence of such conditions; however, the relative contributions of prevention and treatment have not been determined.

The Federal contribution to reducing heart disease and stroke deaths has a long history, during which the role of prevention has continually increased relative to that of treatment. Major epidemiologic studies supported by the National Institutes of Health and conducted in the 1950s and 1960s provided the evidence for defining certain risk factors associated with heart disease and stroke, and for developing intervention strategies that are associated with reduced morbidity.

For example, these studies identified high blood pressure not only as the most important risk factor for stroke but also as a major contributor to coronary heart disease. Recent successes in controlling high blood pressure have clearly contributed to the decline in deaths from stroke and heart disease.

In the early 1970s, the National High Blood Pressure Education Program began, with participation by government agencies, private industry, voluntary health associations, and professional groups. This public and professional education program—coordinated by the National Heart, Lung, and Blood Institute—has been effective in decreasing the proportion of undetected cases of high blood pressure and in increasing the level of control for those cases detected. While progress has been substantial, the opportunity for even greater advances in the control of high blood pressure is reflected in the following section about the Hypertension Detection and Follow-up Program.

Another major risk factor identified in these studies and targeted for special attention is cigarette smoking. The 1964 *Surgeon General's Report on Smoking and Health* was a landmark in identifying this major contributor to both heart disease and cancers—indeed, ultimately as the single most important preventable cause of death. Efforts by DHHS to reduce smoking and its risks continue to expand, and have produced positive results. Adults are quitting smoking at a greater rate than they are taking it up, and those who do smoke are choosing cigarettes with lower tar and nicotine. Among teenagers, the proportion of smokers has declined substantially. The sole exception is teenage females aged 17 to 18 , among whom the proportion currently smoking has remained stable during the past five years.

Studies also identified dietary factors important in heart disease. Premature heart disease is clearly associated with elevated blood cholesterol levels. Heart attacks are five times as frequent among men and women aged 35 to 44 who have cholesterol levels above 265 milligrams/deciliter as among those with levels below 220.

Recent trends indicate an overall reduction in consumption of saturated fats and cholesterol. This decline, combined with increasing public awareness of the relationship between diet and health, may also contribute to decreases in heart disease deaths.

The fact that cardiovascular disease—our Nation's leading killer— has been declining, and that the rate of decline has been accelerating in association with enhanced efforts directed at the major risk factors, is especially encouraging. Additional progress can be expected as the knowledge base deepens with respect to the involved risk factors, and with respect to effective ways of addressing those risk factors.

Hypertension Detection and Follow-up Program

A prominent example of the potential for additional gains resulting from an expanded knowledge base is found in the results of the Hypertension Detection and Follow-up Program, announced in December 1979. This study has been a five-year, randomized clinical trial and provides new insights into the possibility of reducing mortality for the large numbers of people with hypertension, including those with mild hypertension.

The systematic intensive detection, treatment, and follow-up program undertaken nationally in various centers resulted in a significant decline in mortality from all causes and showed clearly the benefits of treatment for persons with mild as well as moderate to severe high blood pressure. People with mild high blood pressure—diastolic blood pressure 90 to 104 at the baseline clinic visit—whose high blood pressure was subjected to aggressive control, experienced death rates 17 percent below those with similar levels who were not participating in the intensive intervention program. Moreover, it was noted that the aggressive follow-up program was even more successful for blacks. Mortality rates for blacks in the program declined 22.4 percent relative to those of the control group, while rates for the others in the experimental groups declined by 10 percent.

The implications of these results for the health of Americans are substantial. High blood pressure is widely prevalent in the United States: An estimated 60 million Americans have blood pressure readings higher than 140/90. An important contributor to stroke, heart disease, and renal disease, high blood pressure is estimated to cost the Nation more than $8 billion each year in medical care costs, lost productivity, and lost wages.

Although Federally funded studies in the late 1960s and early 1970s clearly demonstrated that high blood pressure could be controlled, and that related disease and death for white middle-aged males would decrease accordingly, the National Health and Nutrition Examination Survey indicated that about 50 percent of affected individuals were unaware that they had high blood pressure.

In 1972 the Public Health Service, through the National Heart, Lung, and Blood Institute, appointed a special panel to examine these problems and to recommend additional studies as needed. A large-scale clinical trial was recommended to provide data on the efficacy of antihypertensive therapy in controlling disease and preventing death for the general population.

This study, the Hypertension Detection and Follow-up Program, began in 1973 and has involved 14 clinical centers and nearly 11,000 hypertensive patients. The patients were then between 30 and 69 years of age, of both sexes, and included both blacks and whites. They were randomly assigned to the clinical centers for therapy, or they were referred to their usual sources of care.

Deaths from all causes were tracked, and the results revealed the dramatic five-year mortality reductions noted above for those treated by the clinical centers as compared with those referred for treatment of hypertension by customary sources of care. One of the important next steps is the application of these findings in regular primary care settings to determine which components of the treatment and follow-up regimen can contribute to increased control rates among high-risk groups.

* * * * *

Smallpox eradication, immunization improvements, reductions in infant mortality, declines in heart disease and stroke mortality, and the successful reduction of mortality though hypertension detection and follow-up are five achievements that demonstrate, by example, the strides that can be made against all the preventable diseases through a combination of enhanced prevention services, changes in the environment, and the adoption of risk-reducing lifestyles.

Based on an assessment of the prospects offered by these and similar opportunities to prevent unnecessary disease and disability, specific goals were established in *Healthy People* for improvements in the health of Americans in each of the major life stages:

Healthy Infants: To continue to improve infant health, and by 1990 to reduce infant mortality by a least 35 percent.

Healthy Children: To improve child health, foster optimal childhood development, and by 1990 reduce deaths among children aged 1 to 14 years by at least 20 percent.

Healthy Adolescents and Young Adults: To improve the health and health habits of adolescents and young adults, and by 1990 to reduce deaths among people from 15 to 24 years old by at least 20 percent.

Healthy Adults: To improve the health of adults, and by 1990 to reduce deaths among people aged 25 to 64 by at least 25 percent.

Healthy Older Adults: To improve the health and quality of life for older adults, and by 1990 to reduce the average annual number of days of restricted activity because of acute and chronic illness by 20 percent, to fewer than 30 days per year for people aged 65 and older.

Both *Healthy People* and *Promoting Health/Preventing Disease: Objectives for the Nation,* the volume issued the following year to specify the objectives more completely, have been directed to the identification of national—as distinct from Federal—goals and opportunities. But, as noted in the five examples just reviewed, a great deal can be contributed by various Federal programs. That is largely the subject of this report.

Prevention '80 is the first in a series of annual reports that will highlight the leading accomplishments in prevention during the previous year, measure the Nation's progress toward its prevention objectives, and summarize the Federal contributions to achievement of the objectives. This first chapter has presented several significant recent accomplishments. The remainder of the report will detail the programs and the progress.

Chapter Two assesses our progress in enhancing health by reporting trends in health status indicators for five age groups: infants, children, adolescents and young adults, adults, and older adults. Chapter Three chonicles the efforts of Federal agencies in the broad range of prevention priority areas—not only the work of the Department of Health and Human Services, but also activities of other Federal agencies and departments. Chapter Four provides a complete inventory of prevention activities, according to prevention program categories, within the Department of Health and Human Services.

Taken as a whole, the efforts described in these chapters represent substantial growth toward the prevention measures needed to meet the goals of *Healthy People.*

Chapter 2:

Health Status Trends

Progress in disease prevention must be measured in terms of the reductions of preventable health problems—the absence of illnesses, injuries, and deaths that, based on previous experience, might otherwise have been expected to occur. This chapter of *Prevention '80* displays in chart form various aspects of health-related trends, both for the population as a whole and among the five age categories established by *Healthy People*. These include infants (under 1 year), children (1 to 14 years), young adults (15 to 24 years), adults (25 to 64 years), and older adults (65 years and older). The health trends depicted in these charts highlight the major causes of disease and death for each age group.

Health Status Trends

Overall Trends

In 1978 the National age-adjusted[1] death rate declined to 606 per 100,000 people, the lowest level ever recorded in the United States and a 66 percent reduction from the 1900 rate (Figure 1).[2] This dramatic reduction demonstrates the Nation's success in preventing and treating acute infections and diseases. Influenza and pneumonia death rates, for example, fell from 210 to 15 per 100,000 population, a decline of 93 percent. On the other hand, death rates for many chronic diseases have increased. Cancer rates have risen since the turn of the century from 81 to 134 per 100,000; heart disease death rates have increased from 167 to 208 per 100,000.

Interestingly, the rate of death from stroke declined from 134 to 45 per 100,000 population, and the death rate from accidents declined from 76 to 44 per 100,000. The decline in the age-adjusted stroke death rate was consistent with the overall death rates, so that in 1978 it accounted for approximately the same proportion of deaths as in 1900. As described in Chapter 1, successful efforts to reduce the number of deaths from both heart disease and stroke have more recently effected substantial decreases in the death rate from these diseases.

Note the differences in trends in age-adjusted death rates from selected causes for the period 1900 to 1978 (Figure 2). Death rates from heart disease increased between the year 1900 and about 1950, then declined at an accelerating pace. Death rates from cancer, on the other hand, increased rapidly during the first half of the century, and continued to increase, though more slowly, through 1978. Death rates from stroke have decreased steadily since 1900. The most dramatic decreases were for the infectious diseases such as influenza and pneumonia, for which reductions of 80 percent were achieved between 1925 and 1950.

The contrast between falling influenza and pneumonia death rates on the one hand, and rising cancer death rates on the other, provides a dramatic example of trends with complex roots. Multiple factors are clearly involved: life-saving improvements in the prevention and treatment of infectious diseases; changing lifestyles, both detrimental and favorable to health; a changing environment; and, not the least important, the improved standard of living that has alleviated conditions contributing to susceptibility to disease.

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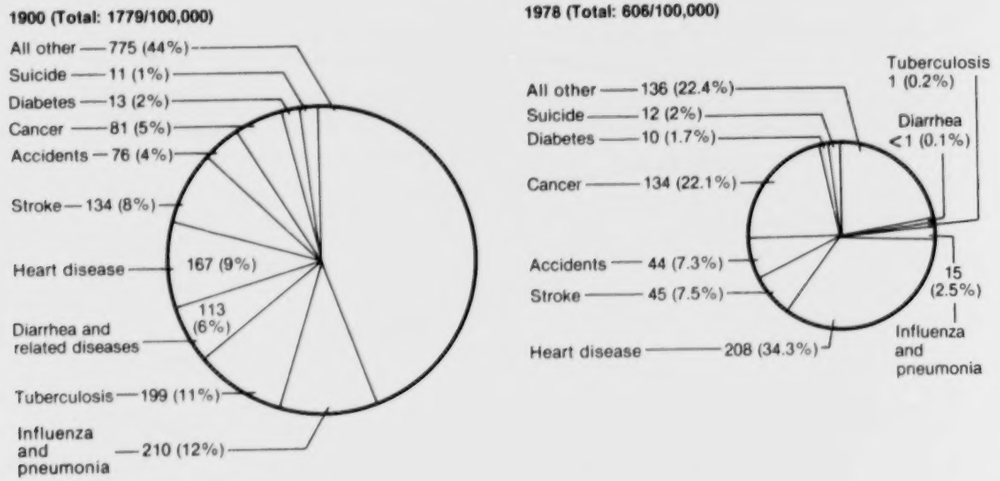
1 Age-adjusted death rates show what the level of mortality would be if there were no changes in the age composition of the population from year to year and are therefore better indicators than unadjusted rates of changes over time in the risk of dying. Age-adjusted rates are computed by applying the age-specific death rates for a given cause of death to the standard population distributed by age.

2 In 1900, the death registration area consisted of 10 States, the District of Columbia, and a number of cities located in other States. This area accounted for only 40.5 percent of the population of the Continental United States.

Figure 1. Leading Causes of Death in 1900 and 1978

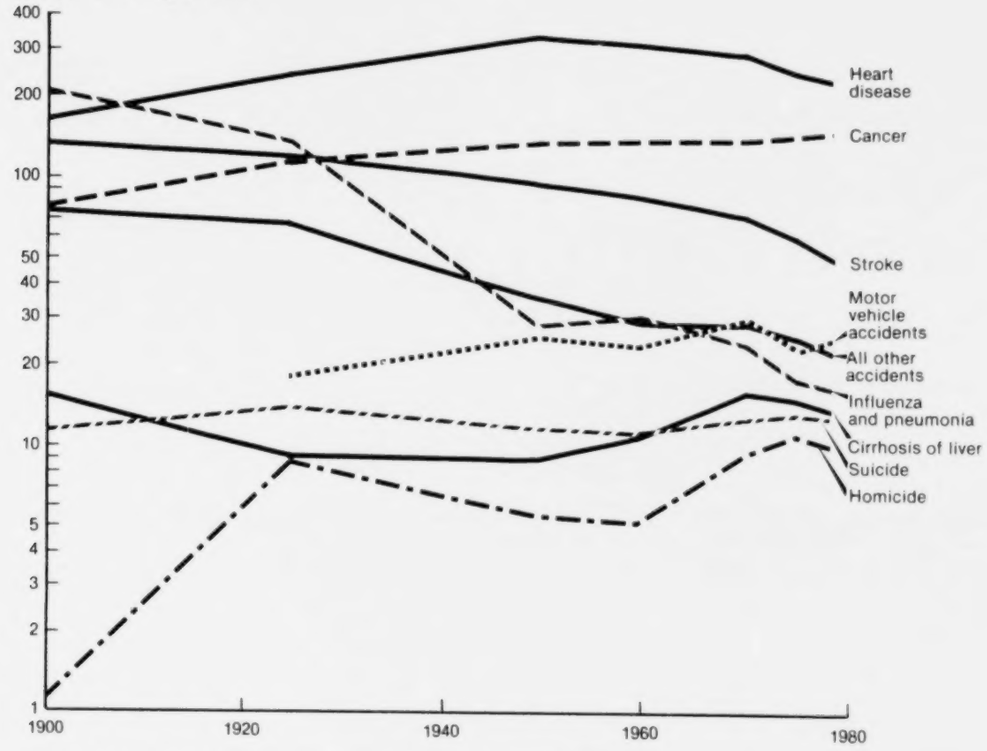

1900 (Total: 1779/100,000)
All other — 775 (44%)
Suicide — 11 (1%)
Diabetes — 13 (2%)
Cancer — 81 (5%)
Accidents — 76 (4%)
Stroke — 134 (8%)
Heart disease — 167 (9%)
Diarrhea and related diseases — 113 (6%)
Tuberculosis — 199 (11%)
Influenza and pneumonia — 210 (12%)
1978 (Total: 606/100,000)
All other — 136 (22.4%)
Suicide — 12 (2%)
Diabetes — 10 (1.7%)
Cancer — 134 (22.1%)
Accidents — 44 (7.3%)
Stroke — 45 (7.5%)
Heart disease — 208 (34.3%)
Tuberculosis 1 (0.2%)
Diarrhea <1 (0.1%)
15 (2.5%)
Influenza and pneumonia

Overall age-adjusted death rate per 100,000 for the leading causes of death in 1900 compared with 1978. Numbers in parentheses indicate percentages of total age-adjusted death rate.

Source: NCHS, "Final Mortality Statistics, 1978," *Monthly Vital Statistics Report*, Vol. 29, No. 6, Supplement 2, September 17, 1980.

Figure 2. Trends in Age-Adjusted Death Rates From Selected Causes: Selected Years, 1900-1978

Rate per 100,000 population



Note: The selected years are 1900, 1925, 1950, 1960, 1970, 1975, and 1978.

Sources: DHHS, *Healthy People: The Surgeon General's Report on Health Promotion and Disease Prevention*, 1979; NCHS, Special Report on Diabetes, Vol. 43, No. 12, 1956; NCHS, *Vital Statistics Special Report*, Vol. 43, No. 3, 1956.

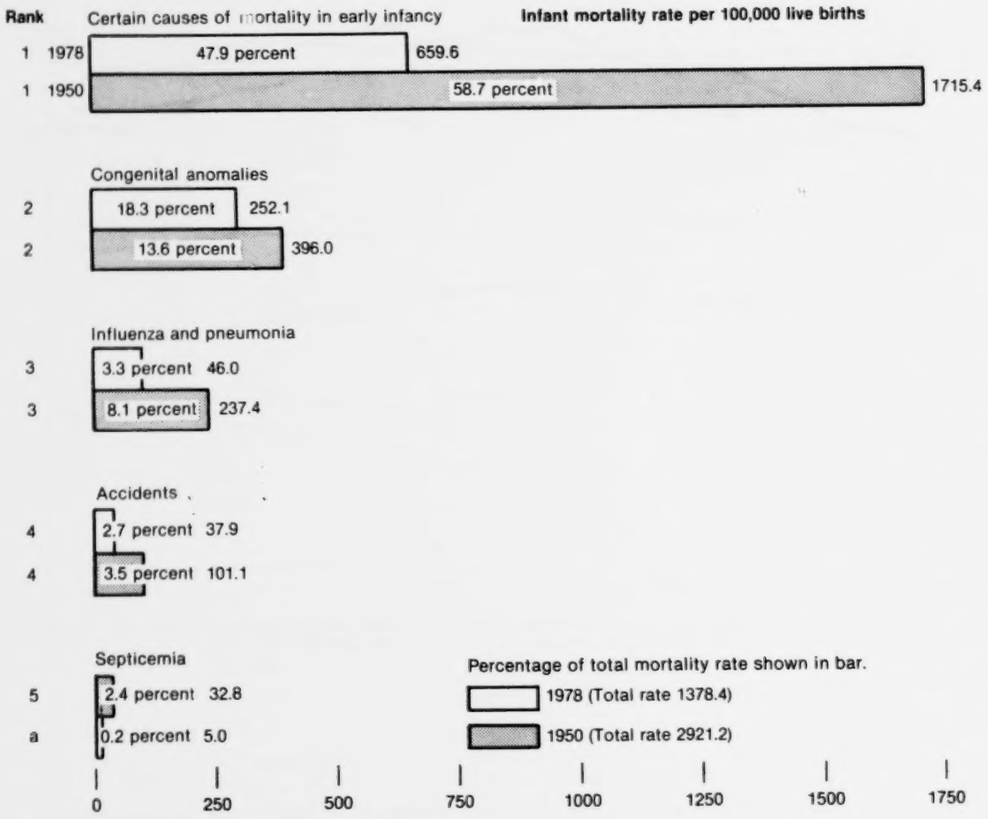
Healthier Infants

Continuing a long-term downward trend, in 1978 the rate of infant deaths reached the lowest level ever recorded in the United States—fewer than 14 for each 1,000 live births. Since 1950, the overall rate for infants has fallen by about one half, reflecting reductions in most causes of infant deaths. Infant deaths from influenza and pneumonia dropped dramatically from 237 to 46 for each 100,000 live births between 1950 and 1978, a decline of 81 percent (Figure 3). In 1978, about 48 percent of the deaths were caused by immaturity and birth-associated conditions. These conditions included respiratory distress syndrome, hyaline membrane disease, unspecified asphyxia of the newborn, birth injury without mention of cause, and other complications of pregnancy and childbirth. This 1978 rate represents a decline in the proportion of deaths from these causes from about 62 percent of all infant deaths in 1950, and is consistent with a drop of nearly 53 percent in the overall infant mortality rate (Figure 3).

The proportion of low birth weight infants—those newborn infants weighing less than 2,500 grams (5 pounds 8 ounces)—is an objective, easily tracked measure, probably best correlated with deaths from immaturity and other birth-associated conditions. Trends in percentages of infants

Figure 3. Major Causes of Infant Deaths: 1950 and 1978

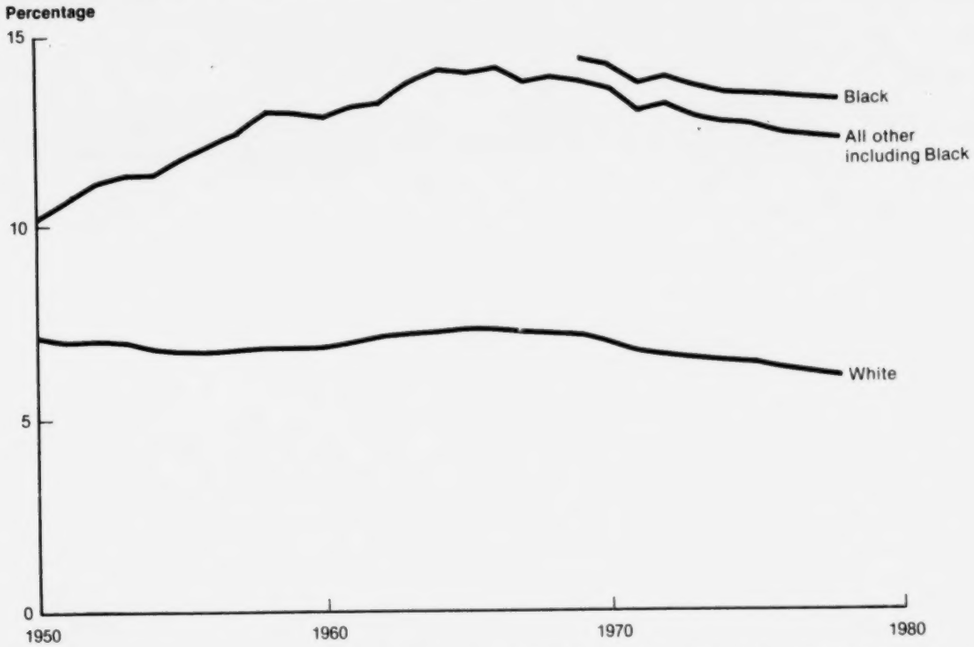
Age Group - Less Than 1 Year



(a) Not ranked in first 10 leading causes of death.

Sources: NCHS, *Vital Statistics—Special Reports—National Summaries*, 1950, Vol. 37; NCHS, "Final Mortality Statistics, 1978," *Monthly Vital Statistics Report*, Vol. 29, No. 6, Supplement 2, September 17, 1980.

Figure 4. Percentage of Infants of Low Birth Weight, By Race: 1950-1978



Sources: NCHS, *Factors Associated with Low Birth Weight, U.S,* 1976, Series 21, No. 37, April, 1980; NCHS, "Final Natality Statistics, 1978," *Monthly Vital Statistics Report,* Vol. 29, No. 1, Supplement, April 28, 1980.

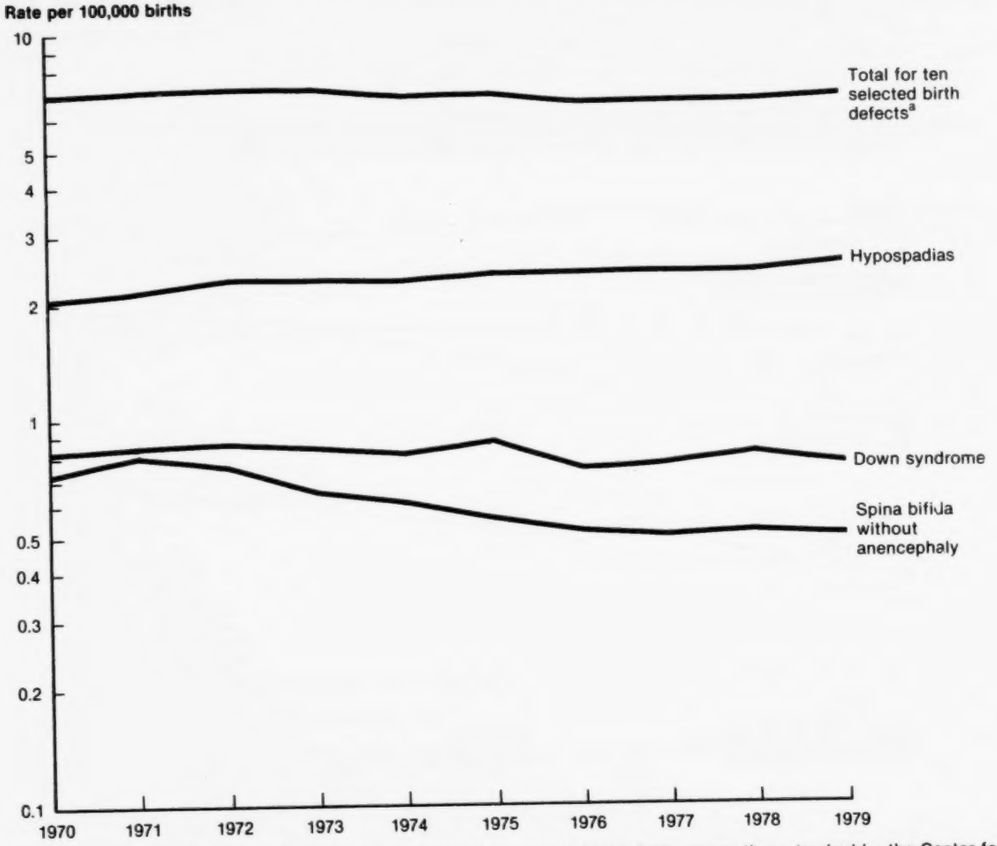
of low birth weight peaked in 1965 and 1966 and have declined gradually since then (Figure 4). Although since 1966 smaller proportions of both white and non-white newborns have fallen in this range, large disparities in percentages of low birth weight infants persist among the races, underscoring the special importance of addressing this problem among black women of childbearing age. A number of maternal factors contribute to low birth weight, including lack of prenatal care, poor nutrition, smoking, alcohol and drug use, age, race, and social and economic background.

Congenital defects were the leading single identifiable cause of infant deaths in 1950 and in 1978. This group of birth defects comprises those caused by developmental or genetic problems rather than injuries *in utero* or during birth. Though the infant mortality rate for congenital anomalies fell somewhat, from 396 to 252 for each 100,000 live births, the actual incidence of specific congenital birth defects remained relatively stable (Figure 3). Only recently has it become possible to track the incidence of birth defects with the benefit of a national birth defects detection and reporting system.

It is estimated that between 1970 and 1978 the total number of birth defects reported for the ten most common types showed a small decline (Figure 5). For some birth defects, spina bifida without anencephaly, for example, there was a small decline during the 1970s; while for others, such as hypospadias, there was a small increase. The fact that death rates from birth defects have fallen over this same period, while the incidence of birth defects has not, reflects advances in neonatology, delivery techniques, urgent care for newborns, and special surgical methods.

Prevention activities directed toward reducing birth defects include: immunization against rubella (German measles) to prevent occurrence of the disease during early pregnancy; intrauterine diagnosis and intervention for severe defects; genetic counseling for parents at high risk of having infants with birth defects; public education campaigns to emphasize the hazards to the fetus presented by alcohol, drugs, and tobacco; and special attention given to identification of toxic exposures that might injure the developing fetus.

Figure 5. Trends in Reported Incidence Rates of Ten Selected Birth Defects: 1970-1979

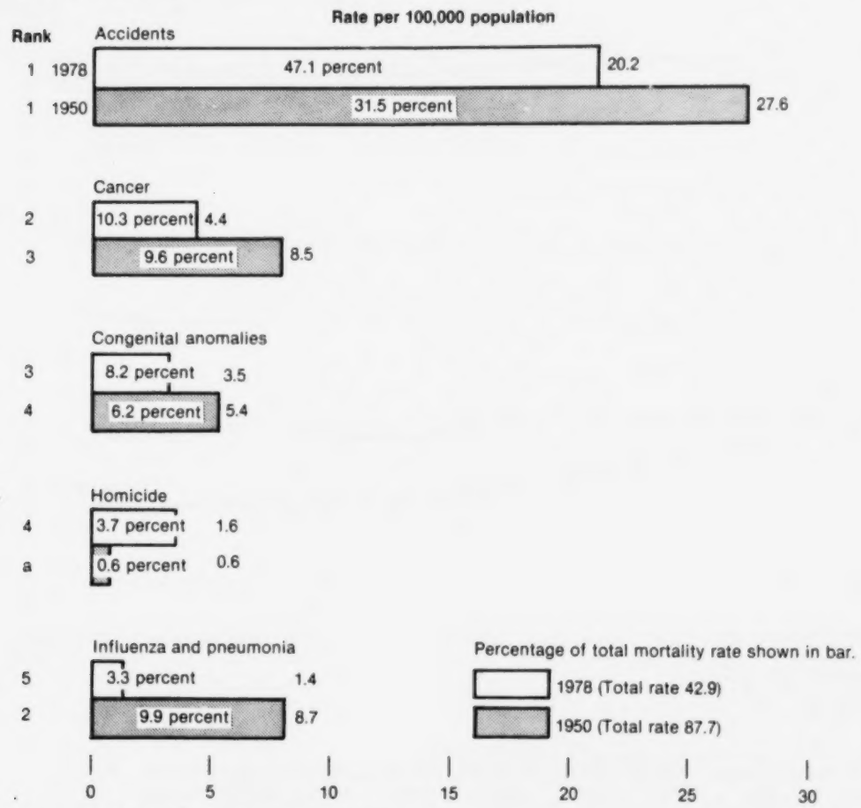


(a) "Selected defects" are the following ten defects, which were selected from among those tracked by the Center for Disease Control Birth Defects Monitoring Program: anencephaly, spina bifida without anencaphaly, hydrocephalus without spina bifida, cleft palate without cleft lip, total cleft lip, tracheoesophageal fistula, rectal atresia and stenosis, hypospadias, reduction, deformity, and Down syndrome. Individual births are counted more than once if more than one defect is reported.

Source: Centers for Disease Control, October 1978.

Figure 6. Major Causes of Childhood Deaths: 1950 and 1978

Age group 1-14 years



(a) Not ranked in first 10 leading causes of death.

Sources: NCHS, *Vital Statistics—Special Reports—National Summaries*, 1950, Vol. 37; NCHS, "Final Mortality Statistics, 1978," *Monthly Vital Statistics Report*, Vol. 29, No. 6, Supplement 2, September 17, 1980.

Healthier Children

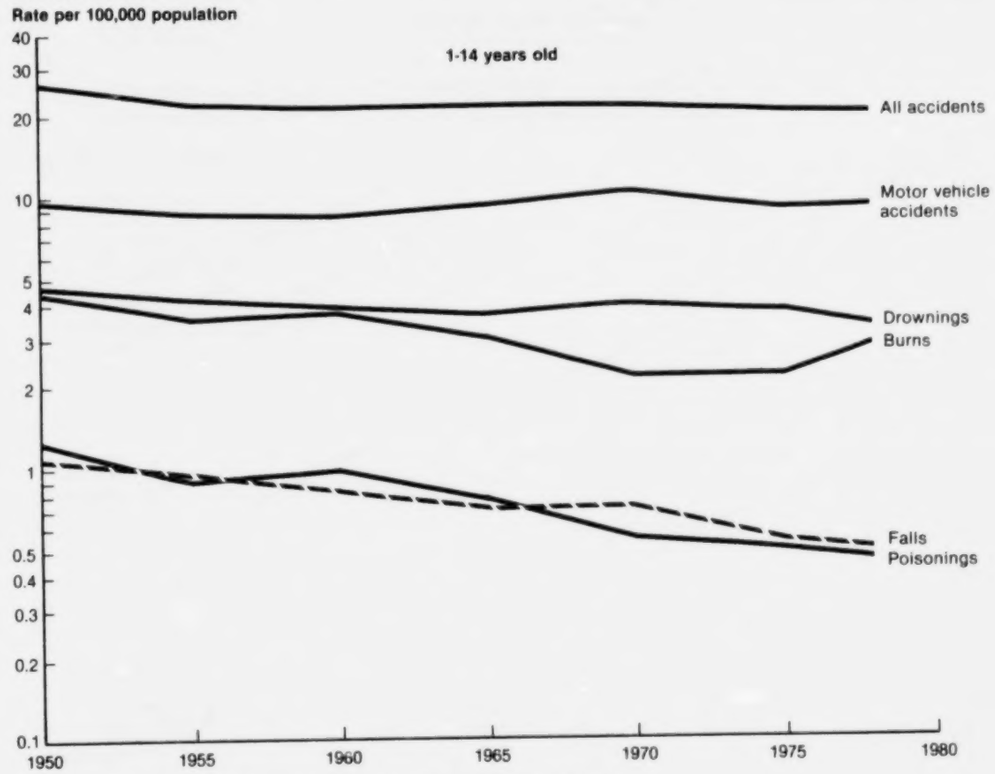
From 1950 to 1978 the death rate for children aged 1 to 14 fell from 88 to 43 per 100,000 population, a reduction of more than 50 percent. The change in rates for particular causes of death has varied widely in both magnitude and direction since 1950 (Figure 6).

Accidents, still the single largest cause of death among children 1 to 14, declined 29 percent—from 28 to 20 per 100,000—between 1950 and 1978. Motor vehicle accidents accounted for about half the accidental deaths in this age group in 1978; although there were fewer such deaths from 1973 to 1975, following the gasoline shortage and adoption of the 55-mile-per-hour speed limit, more recent trends for this cause have not been favorable (Figure 7).

Other major causes of accidental deaths for children are burns, falls, and poisonings, all of which have dropped since 1950, while the rate of drownings has remained comparatively constant (Figure 7). Alcohol is a significant factor in many of these accidental deaths; cigarette smoking is a factor in many fire-related deaths; and a substantial proportion of drownings occur in unattended bodies of water. A major challenge for the 1980s will be to find effective measures for reducing motor vehicle fatalities for children while continuing our efforts to control the other causes of accidental deaths.

Since 1950, impressive reductions in death rates among children have also occurred for influenza and pneumonia and for cancer (Figure 6). The influenza and pneumonia death rate fell by 84 percent for children, a particularly pronounced drop for this age group, although the decline occurred among all groups under age 65. Improvements in access to health care and in living conditions for low-income and minority groups have been important contributors to this reduction, along with advances in medical treatment and in prevention through immunization.

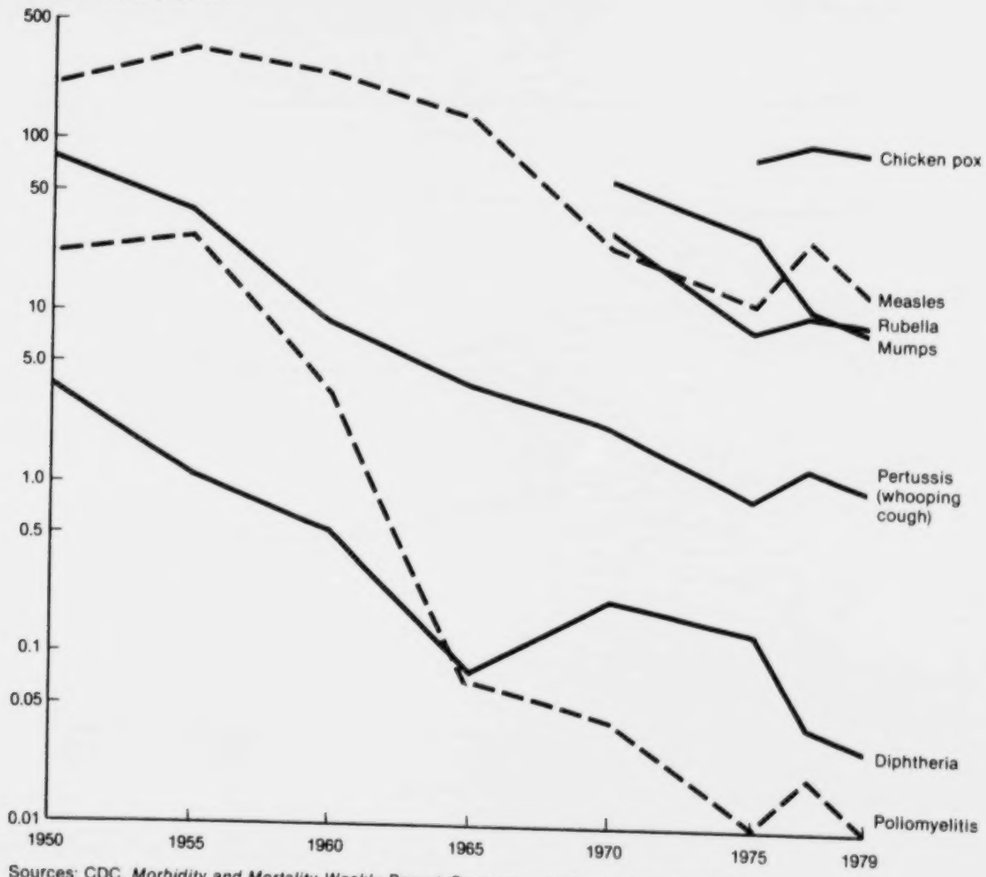
Figure 7. Trends in Accidental Death Rates for Children, From Selected Causes: Selected Years, 1950-1978



Note: The selected years are 1950, 1955, 1960, 1965, 1970, 1975, and 1978.

Sources: NCHS, *Vital Statistics of the U.S., Volume II, Mortality*, Selected Years, published and unpublished data.

Figure 8. Trends in Reported Incidence Rates of Childhood Diseases: Selected Years, 1950-1979



Sources: CDC, *Morbidity and Mortality Weekly Report*, September 1979 and September 1980.

The 48 percent reduction in rates of death from cancer among children is largely attributable to improvements in early detection and treatment of childhood leukemia. The death rate from leukemia has been reduced by approximately one half since 1950.

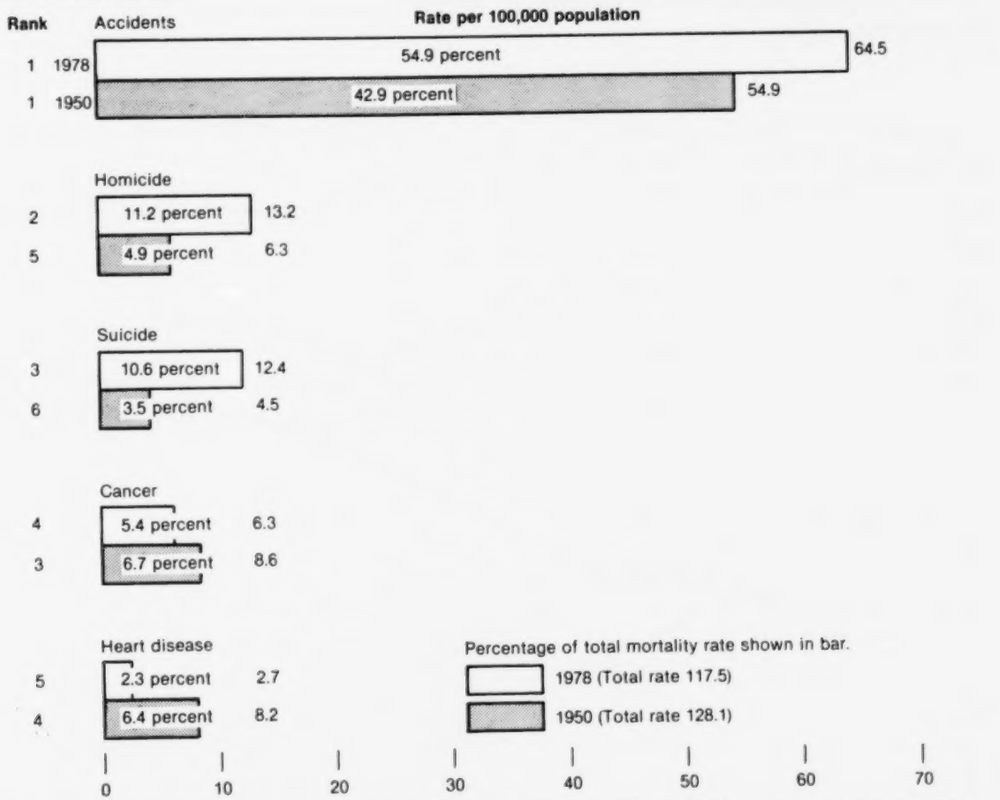
Another major target of the national prevention program is the incidence of childhood vaccine-preventable diseases (Figure 8). The remarkable achievements in reducing the incidence of these diseases reflect the successes of immunization programs for children. However, occasional short-term reversals of trends (e.g., between 1974 and 1977) underscore the need for pursuing vigorously the highest possible immunization levels for young children.

Healthier Adolescents and Young Adults

Since 1950 the overall death rate for 15 to 24-year-olds has declined about 8 percent, while the changes in death rates for the various causes have varied widely (Figure 9). As with children, the single largest cause of death in this age range is accidents; but among adolescents and young adults, motor vehicle accidents account for more than 70 percent of all accidental deaths. For young people, death rates for infectious diseases, cancer, and heart disease declined, but death rates for suicide, homicide, and accidents all increased between 1950 and 1978.

Figure 9. Major Causes of Adolescent Deaths: 1950 and 1978

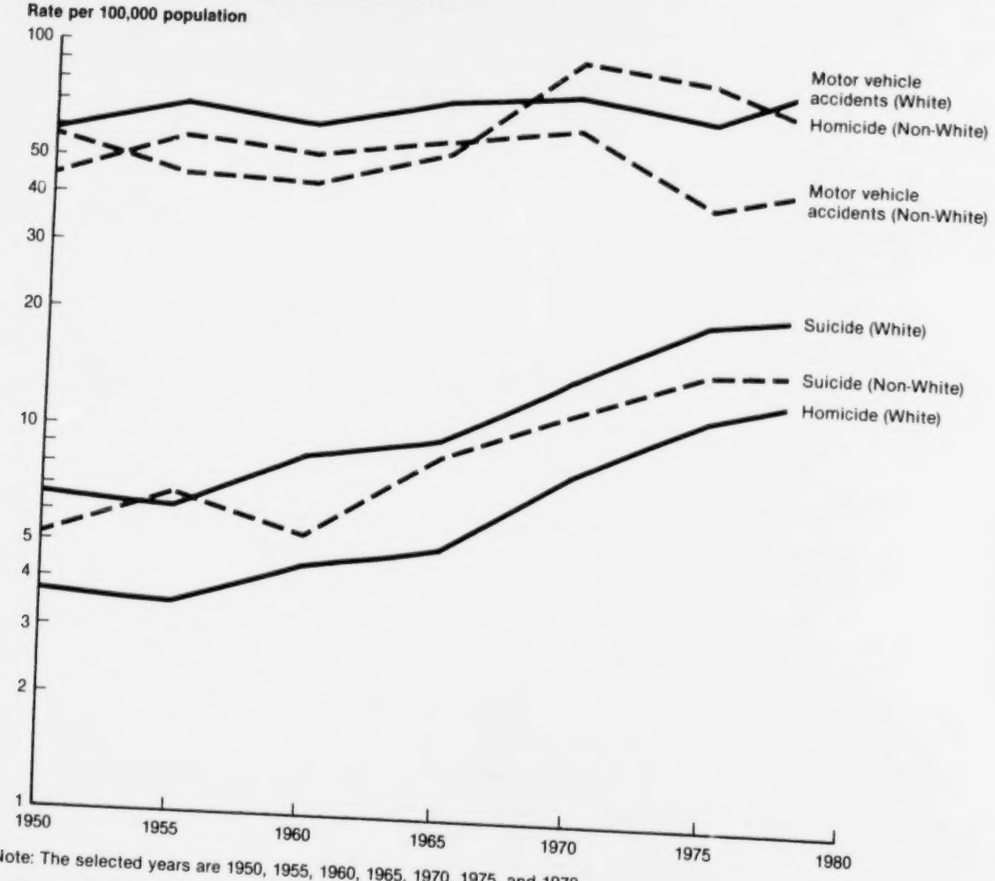
Age group 15-24 years



Sources: NCHS, *Vital Statistics—Special Reports—National Summaries*, 1950, Vol. 37; NCHS, "Final Mortality Statistics, 1978," *Monthly Vital Statistics Report*, Vol. 29, No. 6, Supplement 2, September 17, 1980.

Figure 10. Trends in Death Rates for Suicide, Homicide, and Motor Vehicle Accidents Among Adolescent Males, By Color: Selected Years, 1950-1978

15-24 year old males - White and Non-White



Note: The selected years are 1950, 1955, 1960, 1965, 1970, 1975, and 1978.

Sources: NCHS, *Vital Statistics of the U.S., Volume II, Mortality*, Selected Years, published and unpublished data.

Death rates from motor vehicle accidents, homicide, and suicide differ by sex and race among adolescents and young adults (Figures 10 and 11). For white males, motor vehicle death rates have risen since 1960, except for a small dip between 1973 and 1975 attributable to enforcement of lower speed limits during the gasoline shortage. For other males, the drop in motor vehicle accidents from 1973 to 1975 was more pronounced.

In 1978 motor vehicle accident deaths among 15 to 24-year-old white males outnumbered suicides by four to one and homicides by six to one. However, since the middle 1960s, homicide death rates among non-white males 15 to 24 years old have exceeded death rates from motor vehicle accidents. Fortunately, the homicide death rates for non-white young males have fallen by 28 percent since 1970.

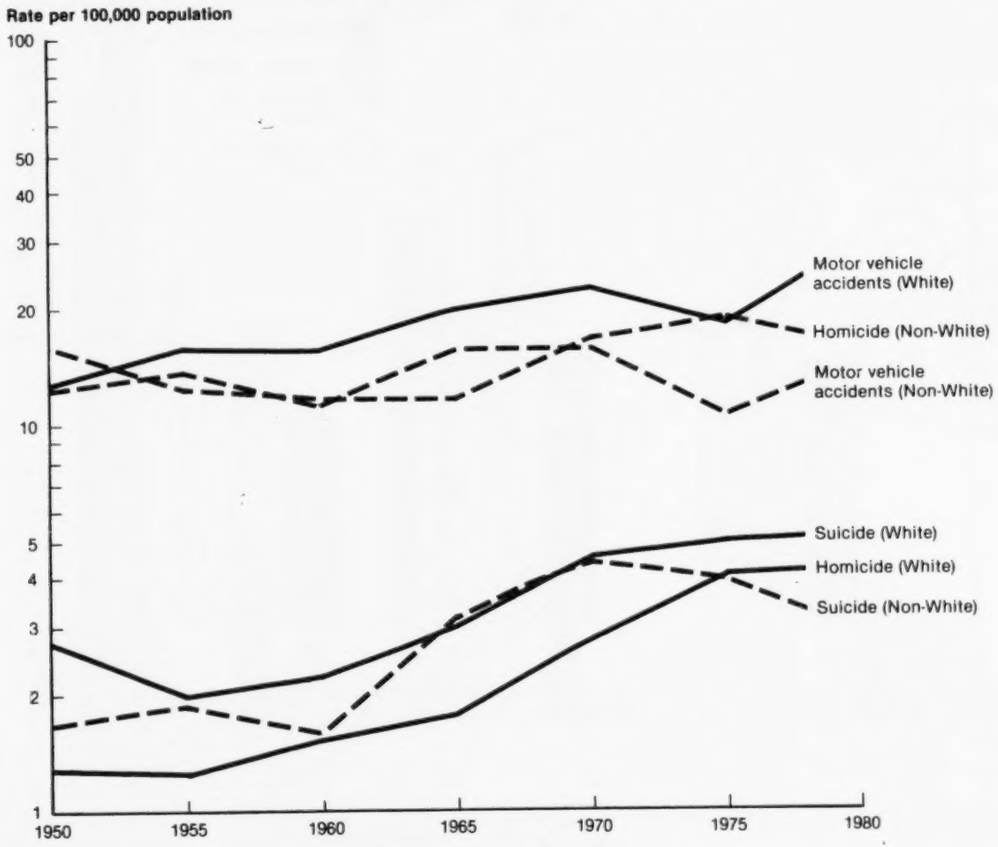
Homicide death rates among white males from 15 to 24 years of age have increased sharply since 1955, but still represent only about one fifth the homicide death rate for non-white males in the same age group. Whites have not yet experienced the same recent drop as non-whites in homicide death rates among young males in this age group. White males have higher rates of death from suicide than do non-white males, and the disparity between these rates has been increasing.

Among 15 to 24-year-old females, the overall 1978 death rate was only about one third that of males. Similarly, the rate of death from motor vehicle accidents for females was about a third the rate for males, and from homicide and suicide, about one fourth the rate for males (Figure 11).

Because many habits and lifestyle patterns evident in young adults carry over into later adult life, and may have pronounced implications for future health, much effort has been directed toward prevention of less desirable habits and patterns. Smoking and alcohol consumption are two of the most prominent target areas.

Figure 11. Trends in Death Rates for Suicide, Homicide, and Motor Vehicle Accidents Among Adolescent Females, By Color: Selected Years, 1950-1978

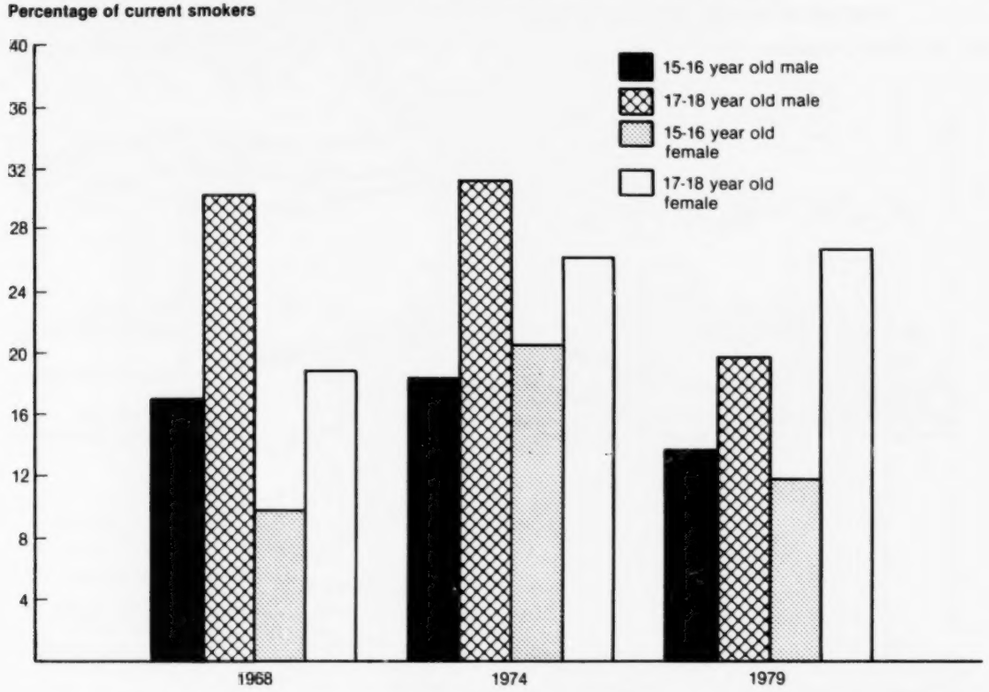
15-24 year old females - White and Non-White



Note: The selected years are 1950, 1955, 1960, 1965, 1970, 1975, and 1978.

Sources: NCHS, *Vital Statistics of the U.S., Volume II, Mortality*, Selected Years, published and unpublished data.

Figure 12. Cigarette Smoking Among Teenagers, By Age and Sex: 1968, 1974, and 1979

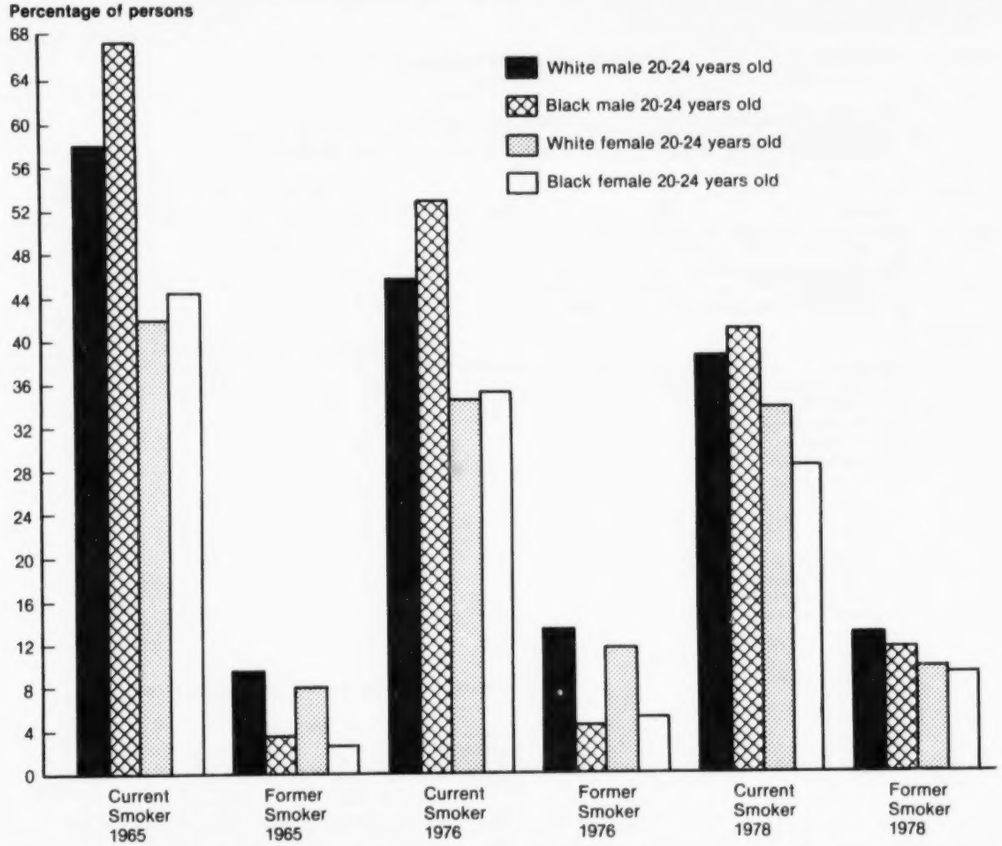


Sources: NCHS, Data for Health Interview Survey, *Patterns and Prevalence of Teenage Cigarette Smoking 1968, 1970, 1972 and 1974;* DHHS, National Clearinghouse on Smoking and Health, October 1980.

Recent data on smoking among adolescents indicate a substantial reduction between 1974 and 1979. The sole exception is that of 17 to 18-year-old females, for whom the proportion currently smoking remained the same between 1974 and 1979 (Figure 12). The large drop in smoking for younger females (15 to 16-year-olds) and males in both age groups may attest to the effectiveness of the educational campaign to warn youths of the dangers of smoking.

Cigarette smoking has also declined recently among young adults 20 to 24 years old (Figure 13). Declines in the percent and the population currently smoking are large for each group with the exception of white females, for whom the 1976 and 1978 surveys showed no change for current smokers and a slight decline for former smokers. Reductions in smoking among non-whites are attributable not only to a decrease in the number of individuals taking up the habit but also to an increase in the number of those giving it up.

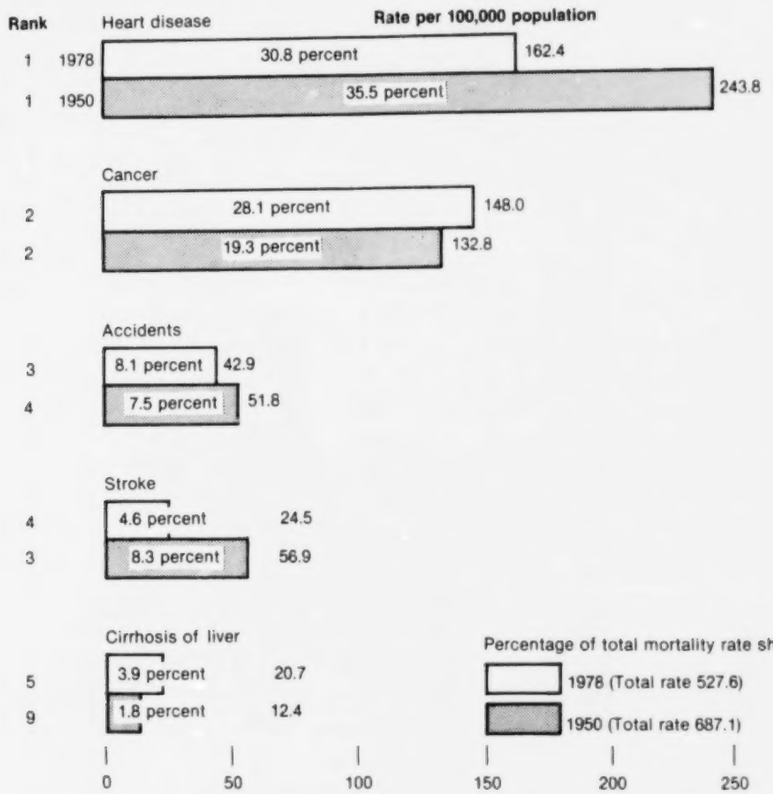
Figure 13. Cigarette Smoking Among Young Adults, By Race and Sex: 1965, 1976, and 1978



Sources: NCHS, Data for Health Interview Survey, *Patterns and Prevalence of Teenage Cigarette Smoking 1968, 1970, 1972, and 1974;* DHHS, National Clearinghouse on Smoking and Health, October 1980.

Figure 14. Major Causes of Adult Deaths: 1950 and 1978

Age group 25-64 years



Sources: NCHS, *Vital Statistics—Special Reports—National Summaries*, 1950, Vol. 37; NCHS, "Final Mortality Statistics, 1978," *Monthly Vital Statistics Report*, Vol. 29, No. 6, Supplement 2, September 17, 1980.

Healthier Adults

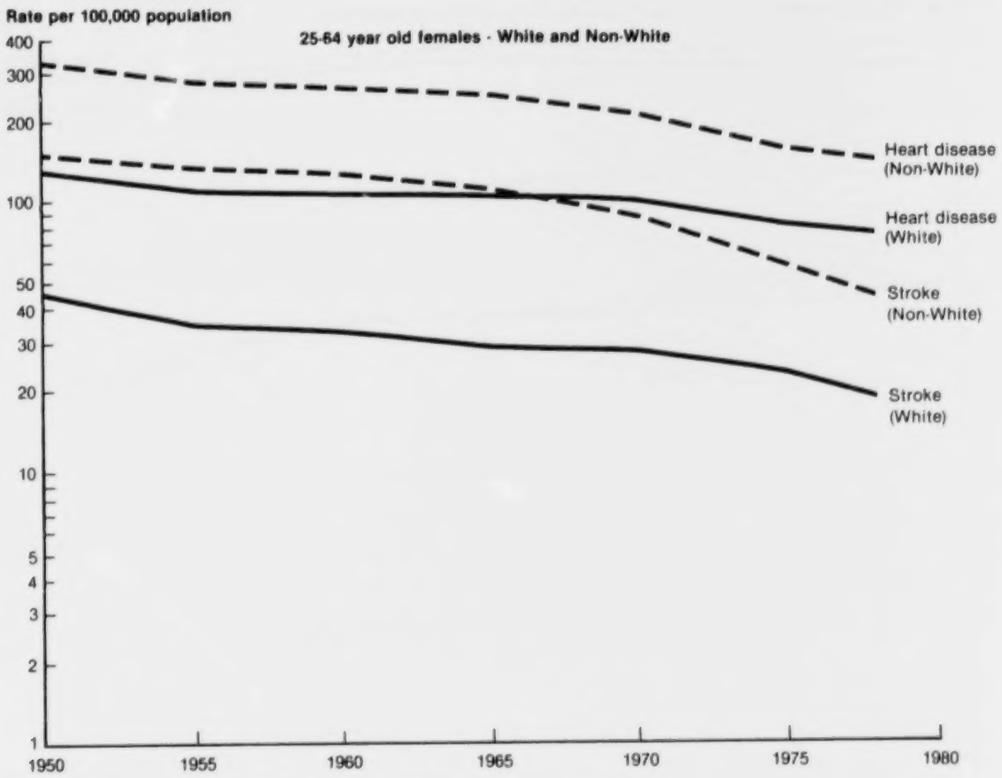
Until recently, the three leading causes of death among adults aged 25 to 64 were heart disease, cancer, and stroke. However, as described in Chapter 1, stroke and heart disease mortality rates have been declining since 1950—a reduction in death rates since then of 33 percent for heart disease and 57 percent for stroke (Figure 14). During this same period, cancer death rates increased 11 percent; accidental death rates fell 17 percent; and death rates attributed to cirrhosis of the liver increased by 67 percent. As a result, accidents have become the third leading cause of mortality for this age group. In fact, stroke now ranks only slightly ahead of cirrhosis, the fifth-ranking cause of death for adults.

Heart disease death rates for non-white women are nearly twice those for white women, although rates for both groups are declining (Figure 15). Among men the rates differ between races less dramatically, but aggregate male death rates from heart disease are three times those for women (Figure 16).

For stroke, large differences are associated with race, with non-whites having death rates up to 2.5 times those for whites. The differences between death rates for men and women are small, but consistent, with women having the lower rates of death from stroke.

Prevention activities likely to result in further decreases in heart disease and stroke prevalence are those related to risk factor reduction (smoking, diet, physical activity, and obesity) and control of high blood pressure. At the same time, medical technology should continue to reduce the mortality rates for those already affected by the disease.

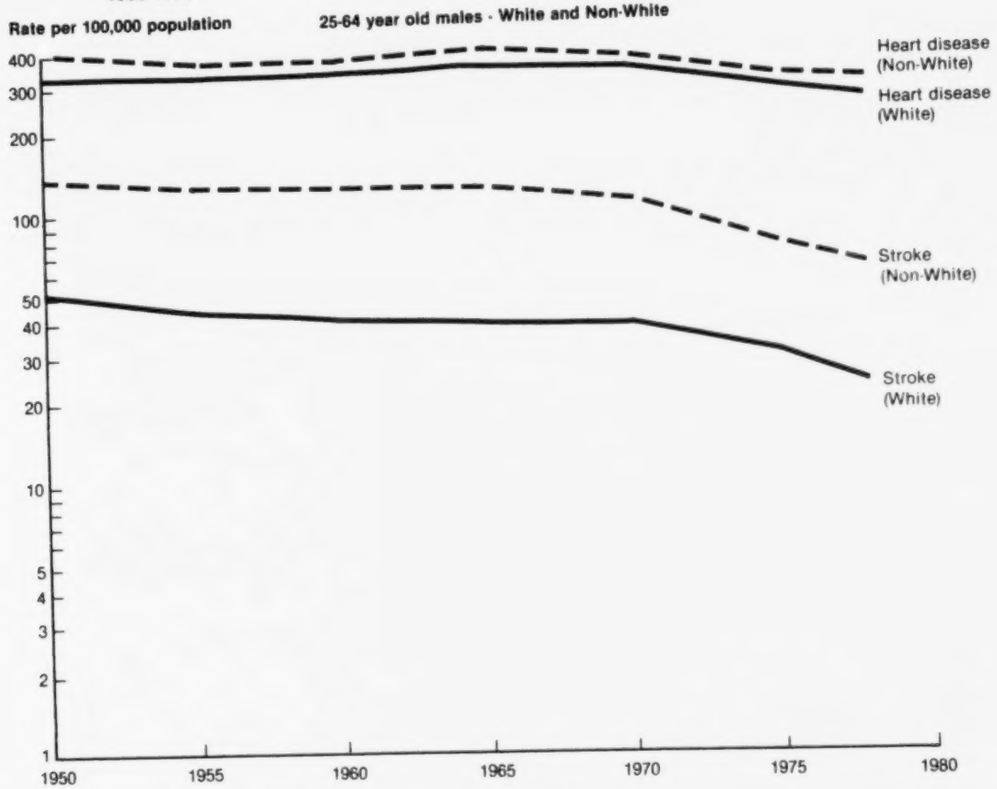
Figure 15. Trends in Death Rates for Heart Disease and Stroke Among Adult Females, By Color: Selected Years, 1950-1978



Note: The selected years are 1950, 1955, 1960, 1965, 1970, 1975, and 1978.

Sources: NCHS, *Health, United States, 1980*, December, 1980; NCHS, "Final Mortality Statistics, 1978," *Monthly Vital Statistics Report*, Vol. 29, No. 6, Supplement 2, September 17, 1980.

Figure 16. Trends in Death Rates for Heart Disease and Stroke Among Adult Males, By Color: Selected Years, 1950-1978



Note: The selected years are 1950, 1955, 1960, 1965, 1970, 1975, and 1978.

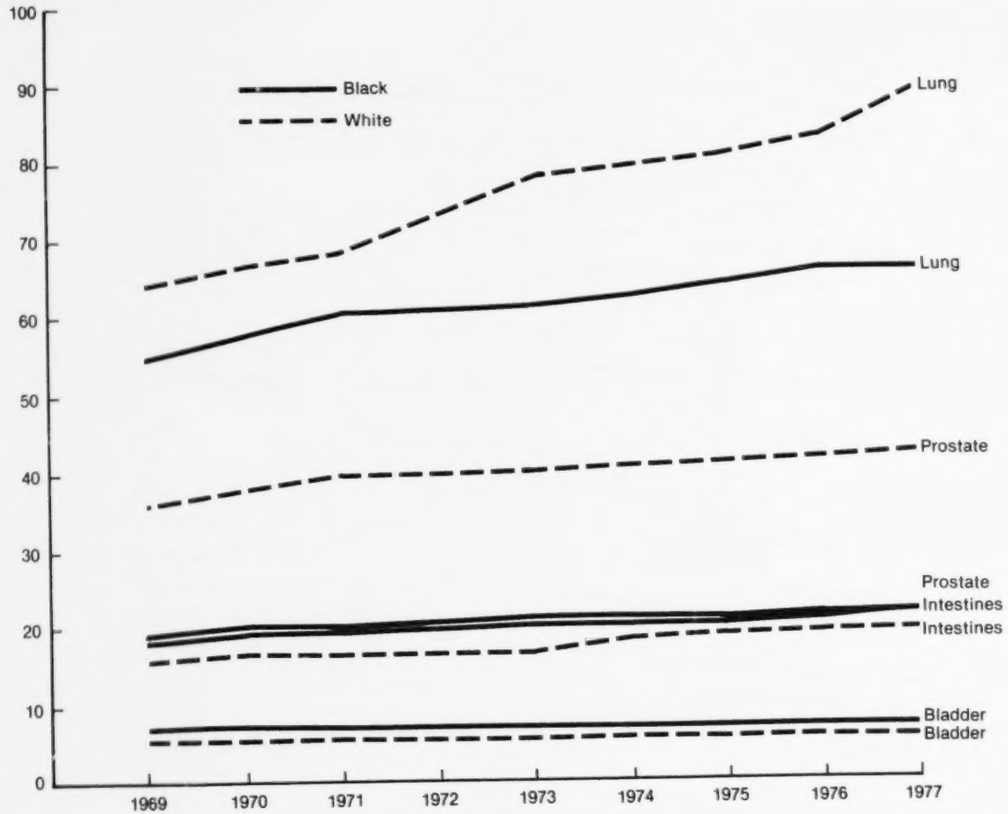
Sources: NCHS, *Health, United States, 1980*, December, 1980; NCHS, "Final Mortality Statistics, 1978," *Monthly Vital Statistics Report*, Vol. 29, No. 6, Supplement 2, September 17, 1980.

Cancers are the second leading cause of death for adults. The 1969-1977 trends in cancer incidence at selected body sites vary for white males and females, depending upon the affected organ. Because of the limited geographic coverage of the DHHS surveillance system, national incidence rates have been estimated only since 1969 for the white population and since 1974 for blacks (Figure 17).

Reliable mortality data for cancers before this period do exist. For whites there are substantial increases in lung cancer among females, reflecting increased smoking by women (Figure 18). Cancer of the cervix declined between 1969 and 1977, while cancer of the uterine corpus increased. Colon cancer incidence rates have remained relatively stable for both males and females.

Though some gains have been made with respect to treatment of certain cancers, prevention must be a major component of any broad strategy. Because of the long time periods over which cancer develops, the results of these prevention efforts may not be reflected immediately in declining death or incidence rates.

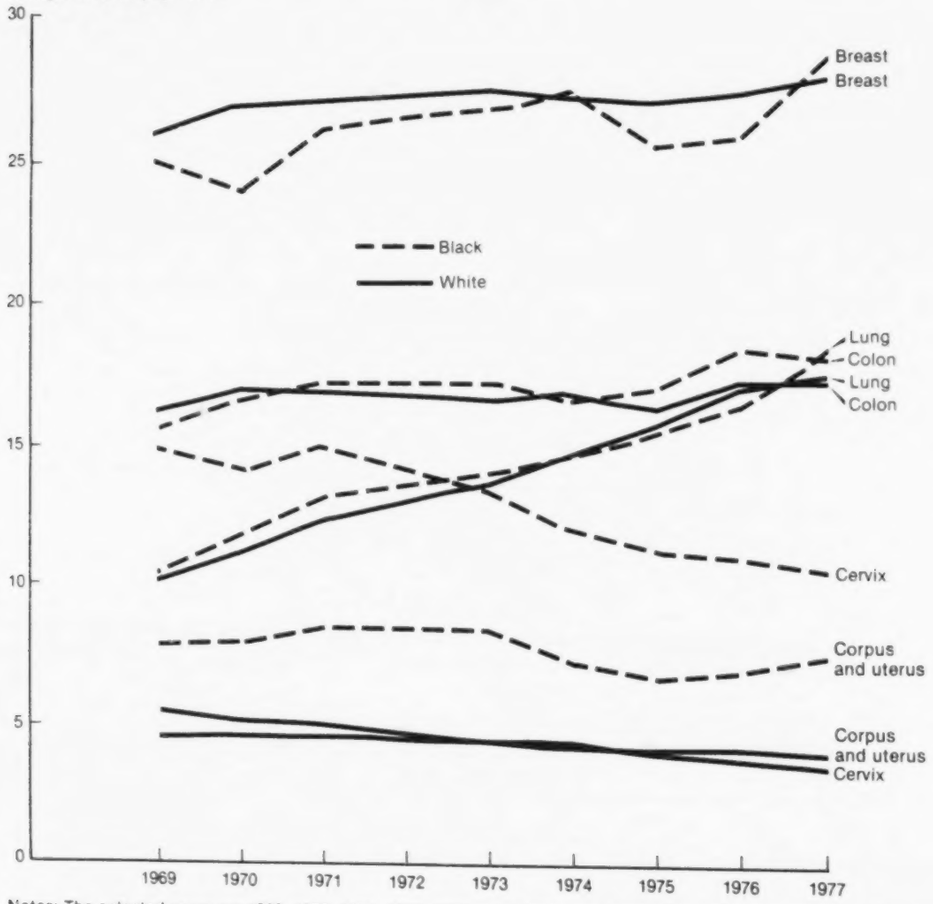
Figure 17. Age-Adjusted Cancer Death Rates for Males, By Site and Race: Selected Years, 1967-1977



Notes: The selected years are 1969, 1970, 1971, 1973, 1974, 1975, 1976, and 1977. Age-adjusted to 1970 U.S. population.

Source: National Cancer Institute, October 1980.

Figure 18. Age-Adjusted Cancer Death Rates for Females, By Site and Race: Selected Years, 1967-1977



Notes: The selected years are 1969, 1970, 1971, 1973, 1974, 1975, 1976, and 1977. Age-adjusted to 1970 U.S. population.

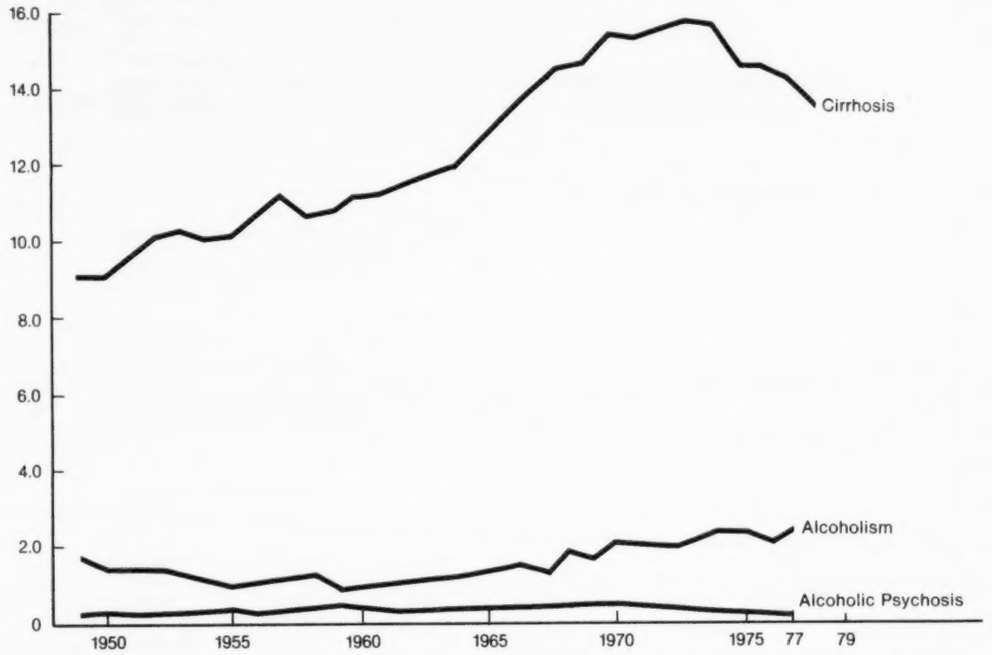
Source: National Cancer Institute, October, 1980.

Among both adults and younger people, alcohol abuse and alcoholism are associated with large numbers of preventable illnesses, injuries, and deaths. According to the National Institute on Alcohol Abuse and Alcoholism, 10 percent of adults who drink can be classified as problem drinkers. Another 26 percent are reported as having potential problems. The public health consequences of problem drinking include injuries and deaths from falls; violence; industrial and motor vehicle accidents; and medical and psychosocial damage such as cirrhosis (the fifth leading cause of death among adults), of which more than 90 percent is associated with excessive use of alcohol; pancreatitis; nutritional deficiencies; cancer; and fetal alcohol syndrome.

Since 1950, there have been significant trends in three selected mortality rates associated with alcoholism and alcohol abuse (Figure 19). The total cirrhosis death rate increased by 37 percent from 1960 to 1970, gradually leveled off, then decreased 10 percent between 1973 and 1977. Deaths related to alcoholic psychosis and alcoholism increased between 1969 and 1970, when alcoholic psychosis began to decrease despite a slight, continuous increase in alcoholism deaths.

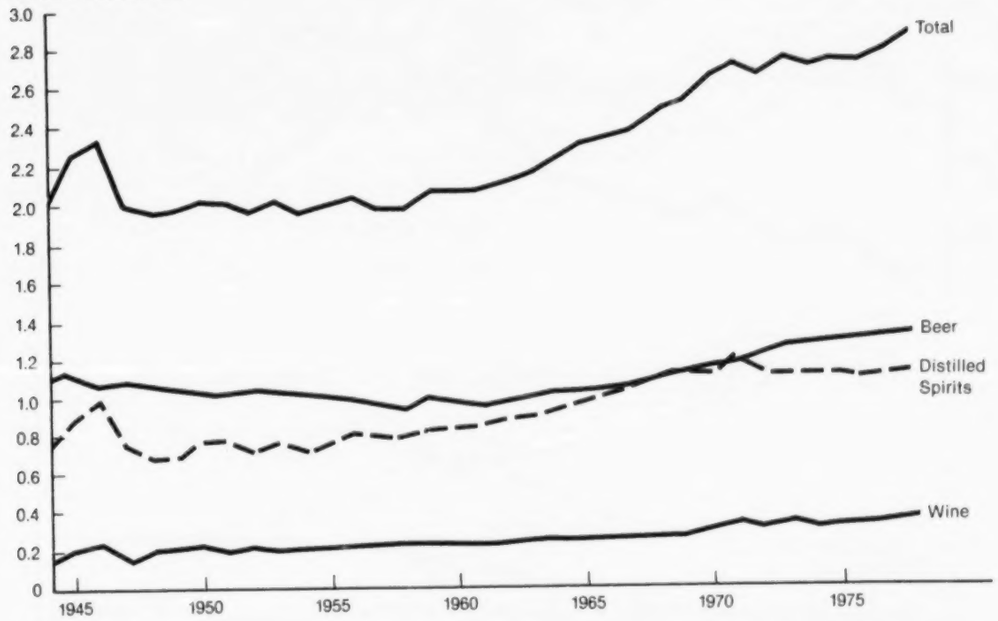
Figure 19. Trends in Selected Alcohol-Associated Causes of Death: 1949-1978

Rate Per 100,000 Population



Sources: National Institute on Alcohol Abuse and Alcoholism and National Center for Health Statistics, October 1980.

Figure 20. Trends in Apparent Per Capita Ethanol Consumption, Based on Beverage Sales: 1944-1978



(a) In U.S. gallons.

Sources: Keller and Gurioli, Rutgers Center of Alcohol Studies, 1980.

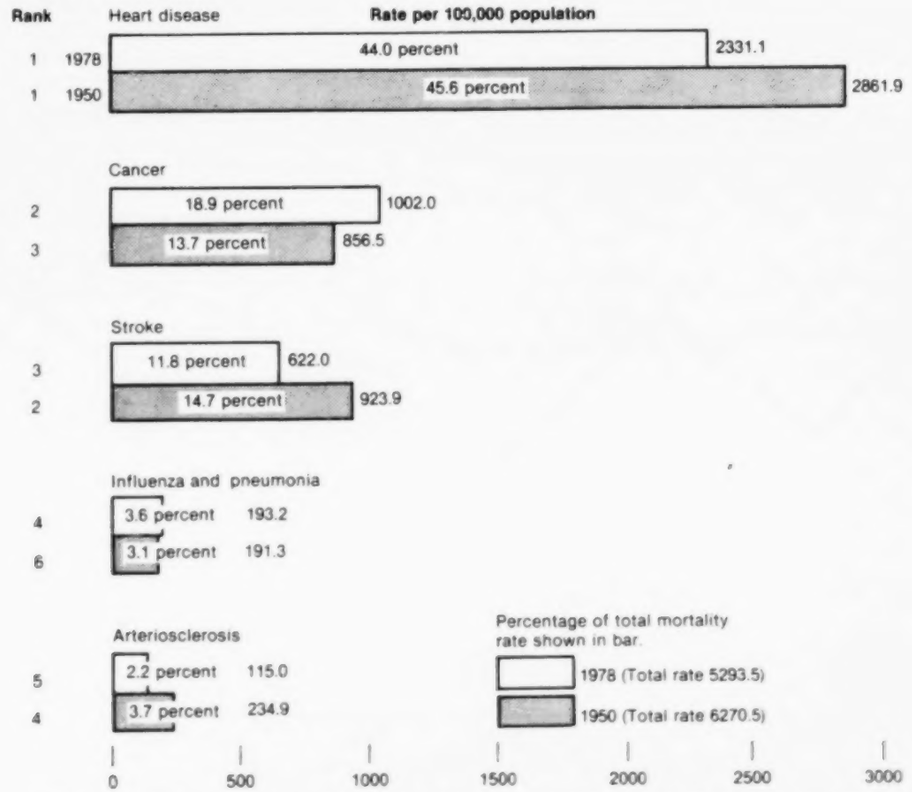
Alcohol consumption rose 30 percent during the 1960s, leveled off through most of the 1970s, then increased another 5 percent by 1978 to 2.82 gallons of ethanol per year for every United States resident aged 14 years or older (Figure 20). In terms of the various beverages consumed, this amounts to 320 twelve-ounce cans of beer, 12.5 fifths of table wine, and 10.5 quarts of distilled spirits per person. It is also important to note that only 30 percent of the drinking population accounts for 80 percent of the total amount of alcohol consumed, and that 10 percent of all drinkers account for 50 percent of the alcohol consumed in the United States. These proportions suggest that the most effective prevention strategies may relate to reducing the number of light drinkers who enter the heavy, problem-drinking group and to preventing the attendant consequences.

Healthier Older Adults

Between 1950 and 1978, there have been substantial shifts in the rankings of the leading causes of death among those aged 65 and over (Figure 21). Although heart disease remains clearly the predominant cause of death, death rates have fallen nearly 20 percent for this condition. Because of the large decrease in stroke death rates and the small, but consistent, increase in mortality rates for cancers, cancer death rates now lead those for stroke.

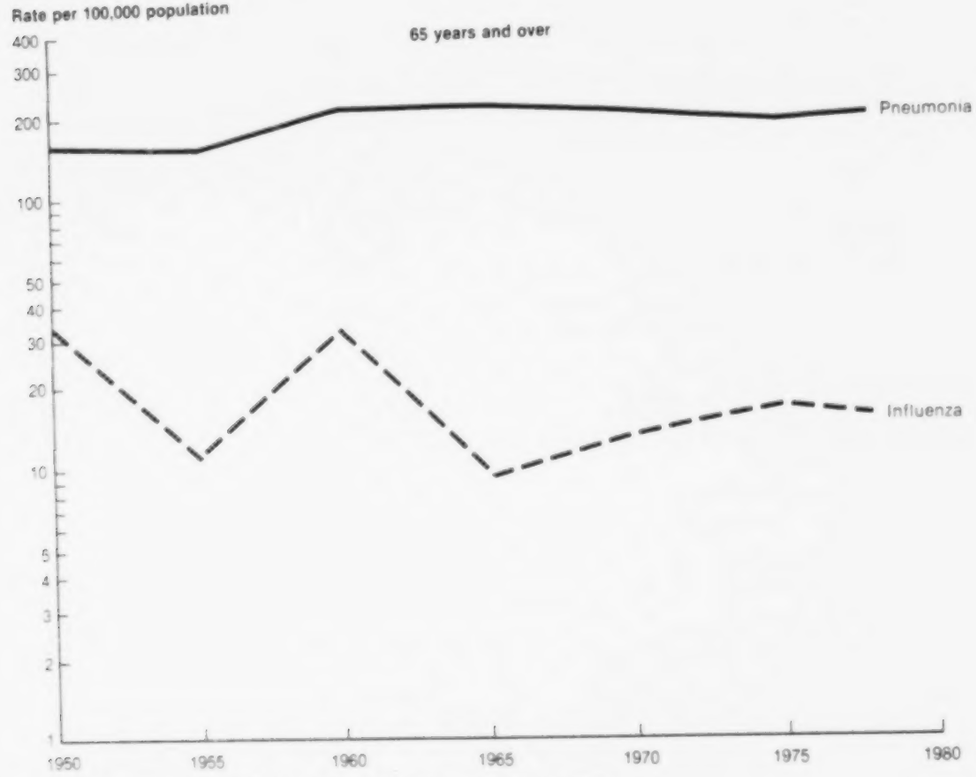
Figure 21. Major Causes of Older Adult Deaths: 1950 and 1978

Age group 65 years and over



Sources: NCHS, *Vital Statistics—Special Reports—National Summaries*, 1950, Vol. 37; NCHS, "Final Mortality Statistics, 1978," *Monthly Vital Statistics Report*, Vol. 29, No. 6, Supplement 2, September 17, 1980.

Figure 22. Trends in Death Rates for Pneumonia and Influenza Among Older Adults: Selected Years, 1950-1978



Note: The selected years are 1950, 1955, 1960, 1965, 1970, 1975, and 1978.

Sources: NCHS, *Vital Statistics of the U.S., Volume II, Mortality*, Selected Years, published and unpublished data.

Though the overall death rate for influenza and pneumonia combined has not changed significantly, the isolated rate for influenza deaths among older adults has followed a declining, though erratic, trend (Figure 22). The rate of death from pneumonia increased sharply between 1955 and 1960, but has decreased slightly since then. The availability of a vaccine for pneumonia may yield a further decrease in deaths from this cause in the 1980s for older adults.

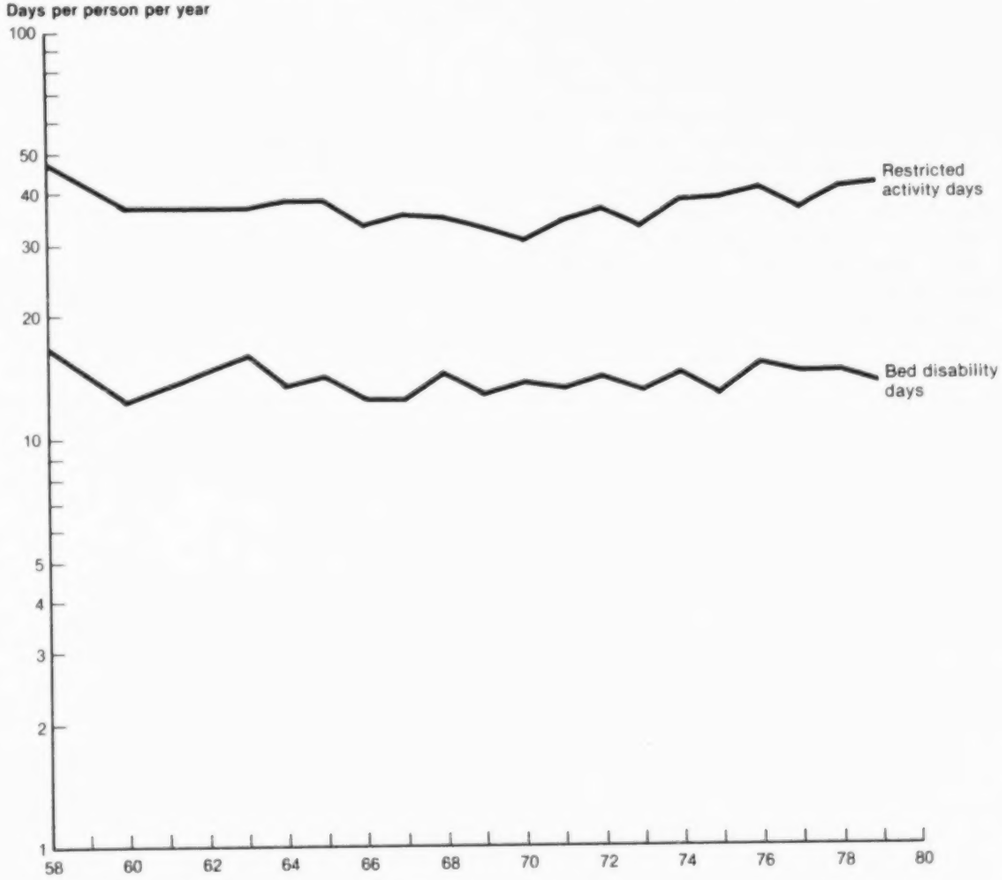
While death rates for older adults remain a priority concern, perhaps the dominant goal relates to improving the quality of life among the elderly. Two indicators of the extent to which health problems inhibit quality of life are the number of days that activity is restricted because of health problems and the number of bed disability days (Figure 23). Restricted activity days, measured through the Health Interview Survey, represent days for which those surveyed reported they were unable to engage in their customary activity. If efforts to enhance the activity level of older adults are successful, the definition of customary activity will change and, paradoxically, the number of restricted activity days may increase. At the same time, the number of bed disability days should respond by declining.

Tracking Prevention Progress

The goals set forth in *Healthy People* are quantitative measures of overall progress. This progress will be achieved through reductions in hundreds of health status indicators—many of which are tracked nationally, others of which are not. An important component of health efforts in the coming decade will be improvement of health status surveillance, the cornerstone of effective prevention program management.

Unmanaged stress and its association with mental illness, cardiovascular disease, and violent behavior represent an important new area for monitoring; other indicators, already being monitored, will require larger samples to be of use in planning and evaluating specific interventions. Better measures of morbidity and mortality related to occupational and environmental factors will continue to be important needs. Infectious diseases, particularly incidence data, are also now incompletely reported, resulting in an underestimation of their impact on the health and productivity of individual geographic areas and of the Nation as a whole. And improved measures are needed to assess individual behavior. As new data are gathered and new trends become apparent, they will be included in subsequent editions of this report.

Figure 23. Trends in Restricted Activity Days and Bed Disability Days Among Older Adults: 1960-1979



Source: NCHS, Data from Health Interview Survey.

Chapter 3:

Agency Innovations

Though participants from many sectors are required to attain our national prevention goals and objectives, an active Federal contribution is important. A diverse group of Federal programs in health, education, social services, nutrition, recreation, transportation safety, and environmental protection provide opportunities for promoting health and preventing disease. Within the Department of Health and Human Services, every agency contains programs with major prevention components—activities that span a broad range encompassing the direct delivery of services, establishment and enforcement of safety standards, sponsorship of information efforts, building the capacity of other sectors, and basic and applied research. Moreover, at least 11 other Federal agencies and departments conduct programs that are directly related to national prevention and health promotion efforts. This chapter reviews the prevention roles of both DHHS agencies and other Federal departments and agencies, and provides highlights of some of the prominent recent agency accomplishments in prevention.

Department of Health and Human Services

Public Health Service

Office of the Assistant Secretary for Health (OASH)

The Assistant Secretary for Health and Surgeon General serves as the Nation's chief health officer, with responsibility for programs and policies related to health services delivery, disease prevention and health promotion, and biomedical research.

OASH Prevention Highlights

Healthy People — The Surgeon General's Report on Health Promotion and Disease Prevention. The major conceptual document for the national prevention initiative, *Healthy People,* describes this country's achievements and opportunities in prevention, notes major health problems for five principal age groups, and sets a measurable health goal to be achieved for each group by 1990. For infants, special attention is given to low birth weight and birth defects; for children, growth and developmental problems and accidental injuries; for adolescents and young adults, alcohol and drug misuse and motor vehicle accidents; for adults, heart disease, stroke, and cancer; for older adults, issues of dependency and influenza and pneumonia. The report also identifies 15 priority action areas crucial to preventing these health problems and achieving the goals of the report.

Measurable Prevention Objectives for 1990. Based on the framework of *Healthy People,* 226 measurable prevention objectives to be achieved by 1990 have been developed for the 15 priority activity areas. These include: high blood pressure control, family planning, pregnancy and infant health, immunization, sexually transmitted diseases, toxic agent control, occupational safety and health, accident prevention and injury control, fluoridation and dental health, surveillance and control of infectious diseases, smoking and health, misuse of alcohol and drugs, nutrition, physical fitness and exercise, and control of stress and violent behavior. For each area, specific objectives are identified with respect to improved health status, reduced risk factors, increased public/professional awareness, improved services/protection, and improved surveillance/evaluation systems. In developing *Promoting Health/Preventing Disease: Objectives for the Nation,* DHHS has drawn upon the expertise of over 500 individuals from the public and private sectors: all agencies of the Department, other Federal agencies and departments, State and local health agencies, consumer groups, voluntary organizations, and academic leaders and other health professionals.

National Toxicology Program (NTP). Established in FY 1979, the NTP addresses the prevention of environmental health hazards through better coordination between scientific institutes and regulatory agencies. DHHS is working through the NTP to strengthen efforts to test toxic chemicals and to develop and validate better testing methods. Membership in this interagency program includes the Food and Drug Administration, the National Institute for Occupational Safety and Health in the Center for Disease Control, the National Cancer Institute and the National Institute of Environmental Health Sciences in the National Institutes of Health, the Office of the Assistant Secretary for Health, the Occupational Safety and Health Administration in the Department of Labor, the Consumer Product Safety Commission, and the Environmental Protection Agency. Through this program, DHHS plans to test 100 new chemicals for carcinogenicity each year. Agencies outside DHHS provide advice on

which compounds should be tested. The list of substances to be tested for teratogenicity and mutagenicity is currently being developed.

Report on the Health Status and Problems of Women. The Office of the Assistant Secretary for Health developed a comprehensive paper that identifies and discusses major health issues specific to women in the United States. The paper, prepared for the United Nations Mid-Decade Conference on Women, was published in October 1980. It will assist the Department in identifying important health problems of American women and possible approaches to prevention. Notable emphasis in this paper is given to breast cancer—the leading cause of cancer death for women. One in 13 women in the United States develops breast cancer; early detection could decrease the number of deaths from this cause. Other issues addressed include health problems associated with increasing lung cancer incidence, menopause and aging, depression, stress, substance abuse, family planning, pregnancy, and childbirth.

Office of Disease Prevention and Health Promotion

The Office of Disease Prevention and Health Promotion (ODPHP) was established to coordinate policy and program development in prevention. Examples of its activities include operation of the Departmental Task Force on Smoking and Health, and the Task Force on Prevention, as well as coordination of the preparation of *Healthy People* and the *Objectives for the Nation.* In addition, the ODPHP sponsors innovative programs related to health promotion.

Office of Health Information, Health Promotion, and Physical Fitness and Sports Medicine (OHP)

The Office of Health Information, Health Promotion, and Physical Fitness and Sports Medicine was created in 1976 to develop and coordinate programs related to these health areas. Working with government agencies and private organizations, OHP attempts to stimulate health promotion efforts in schools and communities, at worksites, and at medical treatment facilities. Through OHP a National Health Information Clearinghouse has been established to facilitate access of consumers and health professionals to a wide range of health information resources.

OHP Prevention Highlights

Regional Forums on Community Health Promotion. Eight Regional Forums on Community Health Promotion were sponsored by OHP in 1979 to encourage business, labor, health educators, media, and civic leaders to organize resources in their own communities for health promotion programs. More than 2,000 local representatives and Federal officials shared concerns, priorities, and resources. A final publication released in 1980, *Promoting Health: A Source Book,* describes several local initiatives and provides a resource guide for local health promotion program leaders.

National Conference on Health Promotion Programs in Occupational Settings. The worksite provides an excellent opportunity for organizing health promotion programs and delivering health services. OHP sponsored the first National Conference on Health Promotion Programs in Occupational Settings in 1979. Attended by representatives of industry, unions, insurance carriers, and members of the academic/scientific community, the conference identified model programs and encouraged the development of programs at the worksite to assist the people in improving health. As a follow-up to the conference, throughout 1980 OHP has worked with industry and other private sector organizations to develop guidelines for worksite health promotion programs and to establish a common data base for comparative evaluation in programs in several companies.

National Conference on School Health. OHP—with the Bureau of Health Education, the Office of Comprehensive School Health in the Department of Education, and selected professional health education organizations—sponsored a national conference on child health entitled "Promoting Health Through the Schools" in the summer of 1980. The conference examined methods of integrating school health services with school health education programs, based on presentations of model programs in both areas. A meeting following this conference was held in October 1980 to identify national health objectives that could be effected through school health programs; to set priorities among those objectives; to identify national, State, local, professional, and consumer organizations that may contribute to accomplishing the objectives; and to advise OHP about a general implementation strategy.

HEalthWorks. In May of 1979 the OHP cosponsored HEalthWorks, an outdoor health fair held in Washington, D.C., to serve as a model for

communities throughout the country in using creative methods to provide information about healthful living. *Toward a Healthy Community*, a two-volume manual, was published to describe the health fair and to suggest ways in which communities can use similar events as vehicles for generating media attention to health promotion and for encouraging cooperation among community agencies.

Minority Group Health Promotion. The OHP is developing a mechanism to increase involvement of minority groups in the development of national health promotion/prevention policy. As an initial step toward this goal, a series of five one-day workshops addressing the health priorities of Native Americans and Asian, Black, Hispanic, and elderly Americans was held in Washington, D.C., during May 1980. The recommendations of these workshops are included in the summary report and proceedings.

Community Technical Assistance Projects. Throughout the country, communities are developing, implementing, or expanding innovative programs among various population groups to help people reduce health risks through changes in personal habits. On a pilot basis OHP has provided technical assistance to 17 communities representing a cross-section of the country, ranging from the Riverside County Health Department in California to Appalachian Leadership and Outreach, Inc., in eastern Kentucky, to the Baltimore City/County Health Department. A second technical assistance project, designed to document the experience of five communities through case studies, is also being conducted by OHP. A guide for other communities interested in initiating a health promotion program will be prepared, based on these projects.

HEALTHSTYLE Campaign. In 1980 OHP initiated a nationwide campaign to educate the public about the relative risks to their health of certain behaviors. The major areas addressed by the campaign are smoking, alcohol and drug misuse, stress, nutrition, exercise, and safety. A HEALTHSTYLE self-test was developed for distribution throughout the country to help individuals assess the relative risk to their health and to encourage them to reduce those risks. The effort includes television and radio public service announcements in English and Spanish, and community health organizations have been enlisted in nine test cities across the United States to aid in the effort to disseminate information materials. The intermediary role includes distribution of posters, booklets such as *Toward a Healthy Community*, print ads, HEALTHSTYLE brochures, and transit cards, as well as referral of individuals to sources of help in reducing risks to their health and evaluation of the effectiveness of the campaign.

Nutrition Coordinating Committee (NCC)

The Department's Nutrition Coordinating Committee (NCC) is responsible for enhancing communication among agencies on the Department's many activities in nutrition and for working with food industry and professional nutrition societies on nutrition policy issues of mutual interest. Standing subcommittees have been formed to facilitate collaboration in six areas of nutrition: education, research and training, services, nutrition status monitoring, food safety and quality, and international nutrition.

NCC Prevention Highlights

Conference on Nutrition Education. The National Conference on Nutrition Education, sponsored by the Department of Health and Human Services in conjunction with the Department of Agriculture, the Federal Trade Commission, the White House Office of Science and Technology Policy, and the Society for Nutrition Education, was convened in September 1979. The focus of the conference was the nutrition education needs of the general population and, in particular, pregnant women, children, adolescents, low-income populations, the elderly, and persons with diet-related diseases. Options and priorities for nutrition education were recommended. The proceedings of the conference were published as a supplement to the *Journal of Nutrition Education.*

Dietary Guidelines for Americans. In January 1980, the Department of Health and Human Services and the Department of Agriculture jointly issued a set of dietary guidelines entitled *Nutrition and Your Health.* These guidelines were intended to assist generally healthy people in selecting a basic, balanced diet for maintaining normal weight and good health. Seven rules are suggested, including advice on which foods to eat and which to avoid. Over 5 million copies of the guidelines have been distributed to the public.

Office of Management

The President's Council on Physical Fitness and Sports (PCPFS)

The PCPFS was established in 1956 as the President's Council on Youth Fitness, and its responsibilities were expanded to include the

adult population in 1963. The agency works with State and local governments, schools and colleges, professional associations, sports organizations, and the private sector to promote participation in exercise and sports. Specific programs include technical assistance to various organizations, public service campaigns, promoting physical activity, regional leadership training workshops, awards to youth for outstanding physical achievement, and publication of research information. In 1980, the President instructed the PCPFS to concentrate on promoting daily physical education programs in the schools; establishing Governor's Councils on Physical Fitness and Sports in all 50 States; urging employers to establish employee fitness programs; and encouraging all Federal departments and agencies to support physical fitness programs for their personnel.

PCPFS Prevention Highlights

National Conference on Physical Fitness and Sports for All. The National Conference on Physical Fitness and Sports for All, cosponsored in February 1980 with the OHP and the Department of Education, provided a forum for reviewing and discussing the central physical fitness issues for all age groups. The conference focused on exchanging empirical information on physical fitness practices and programs, examining the application of research findings to programs, and exploring the concept of sports for all. The proceedings of the conference are available.

White House Symposium on Physical Fitness and Sports Medicine. In October 1980, the PCPFS cosponsored with the White House, the OHP, the American Medical Association and the U.S. Department of Defense a symposium on preventing and treating injuries caused by vigorous sports and exercise. Physicians, other health professionals, and physical fitness and sports experts presented information about preventive techniques and proper equipment. More than 300 members and students of the health and sports professions attended the two-day symposium.

Office on Smoking and Health (OSH)

The long-range goal of the Office on Smoking and Health (OSH) is to reduce deaths, disabilities, and health care costs associated with cigarette smoking. To accomplish this goal, the OSH sponsors programs designed to provide information on the prevalence of smoking and associated attitudinal, epidemiologic and economic factors; reduce the number of women who smoke and are pregnant, take oral contraceptives, or have increased risk of disease because of other factors; reduce the number of children and adolescents who smoke; reduce smoking among persons exposed to occupational health hazards, including asbestos; and reduce smoking in racial and ethnic minorities.

OSH Prevention Highlights

1979 Surgeon General's Report on Smoking and Health. In 1979 the Office on Smoking and Health completed *Smoking and Health: A Report of the Surgeon General,* the most comprehensive review to date of research on the health consequences of smoking. The 1979 report also contains information on new areas, including health effects, public education, prevention, and public policy. An important focus is that on increased risks to smokers exposed to certain occupational hazards, such as those workers in the asbestos, rubber, coal, textile, uranium, and chemical industries. Also addressed are the effects of smoking on drug responses, nutrition, and diagnostic tests; the excess morbidity and absenteeism among smoking workers; and the special risks for women who smoke.

1980 Surgeon General's Report on Smoking and Health. In January 1980, *The Health Consequences of Smoking for Women* was released to the public. The report addresses the major health issue of cigarette smoking by women, includes recent data on cigarette consumption, and documents changes in smoking behavior by women. This report establishes that women who smoke encounter risks similar to those of male smokers. Moreover, the report notes that the incidence of lung cancer among women is rising sharply, a result of smoking initiated during and immediately following World War II. New evidence is reviewed on the harm inflicted by cigarette smoking during pregnancy on the fetus and newborn baby, and on the special risks of heart attacks for women smokers who also use oral contraceptives.

National Poster and Essay Contest. To increase awareness among youth of the health risks of smoking, OSH conducts national poster and essay contests for seventh-graders across the country. In 1979, 18,000 seventh-graders submitted posters and essays. The winning posters and essays were shown in a series of exhibits throughout the Nation. The winning posters and essays selected from 37,600 submitted in 1980 will be featured in a nationally distributed brochure.

National Media Campaign—Evaluation. To impress upon teenagers the hazards of smoking and its impact on health, OSH initiated a national media campaign in August 1979. To achieve its aim, this campaign employed public service announcements on TV and radio; programs for radio; advertisements in journals, magazines, and school and college newspapers; public transit and point-of-sale displays; and pamphlets. A formal evaluation of the effectiveness of this campaign is under way.

Office of Adolescent Pregnancy Programs (OAPP)

OAPP was created in 1978 to help establish networks of community-based services for adolescents—those already pregnant or parents as well as those who wish to avoid pregnancy. Every year, one million adolescents become pregnant. OAPP coordinates Federal programs and policies with the aim of reducing the number of unplanned initial and repeat adolescent pregnancies. In addition, the OAPP provides technical assistance and administers a grant program for community adolescent health projects.

OAPP Prevention Highlights

Grant Program. In 1978 Congress authorized a grants program in response to the growing awareness of the problem of teenage pregnancy. Under this program, since 1979, OAPP has awarded $6.4 million in grants to 27 public or nonprofit private organizations to provide comprehensive health, education, and social services to pregnant teens and young parents. Projects are now located in 21 States and the District of Columbia. Some 38,000 teenagers will benefit from a wide range of services including pre- and postnatal care, infant day care, training in parenting skills, vocational education and job training, social services, family planning, and education in sexuality and family life. Grantees make maximum use of existing programs and seek to bring together Federal, State, and private sector funds in support of these services.

Technical Assistance Workshops. In 1980 OAPP initiated a series of technical assistance workshops to be held throughout the United States in order to share ideas about comprehensive programming for pregnant adolescents and adolescent parents and to advise prospective grant program applicants about funding procedures and requirements.

Office of Population Affairs (OPA)

The Office of Population Affairs is responsible for the overall planning, direction, coordination, monitoring, and evaluation of the population research and family planning service programs offered by various agencies in the Department of Health and Human Services. These programs have been designed to promote the development of healthy families and to prevent the physical, emotional, and social ills associated with unplanned or unintended pregnancies and births. The health implications of effective family planning services are significant for certain categories of women, among them 4.9 million teenagers and 5 million low-income women who constitute the priority population served by the programs that OPA oversees.

OPA Prevention Highlights

Sterilization Regulations. OPA has lead responsibility within the PHS for directing implementation of new regulations governing Federal expenditures for sterilization. Approximately 100,000 sterilizations are funded by the Department each year. New rules were promulgated in 1979 to provide greater protection against abuse of this family planning method in specific cases. OPA has conducted special sterilization education programs to assure that providers and patients are aware of their rights and responsibilities under the new rules. In addition, OPA is conducting an assessment of the effects of the regulations to identify hardships or problems created by specific provisions.

Evaluation of Counseling in Family Planning Programs. OPA has initiated a study of ongoing counseling practices in family planning programs, the results of which will guide policy concerning the desirability and feasibility of providing counseling services in addition to information and education on contraceptive methods. The primary objective of the project is to ascertain whether such services provide an effective approach to preventing unintended pregnancies, particularly among the teenage population.

Office of Health Research, Statistics, and Technology (OHRST)

The Office of Health Research, Statistics, and Technology (OHRST) serves as the principal advisor to the Assistant Secretary for Health in the areas of health services research, health

statistics, and health technology assessment. In carrying out its mission, OHRST provides administrative support, programmatic oversight and coordination of the activities of the National Centers for Health Services Research (NCHSR), Health Statistics (NCHS), and Health Care Technology (NCHCT).

In addition to specific activities that relate to primary prevention objectives, many other activities within the National Centers serve to broaden and enhance our understanding of and ability to assess the prevention efforts of the Department. Included are the baseline and targeted statistical activities of NCHS such as the Health and Nutrition Examination Survey and the Health Interview Survey, as well as the consensus exercises sponsored by the NCHCT.

National Center for Health Services Research (NCHSR)

The National Center for Health Services Research (NCHSR) undertakes and supports research, demonstrations, and evaluations on problems in the organization, delivery, and financing of health care services. It also serves as the focal point for dissemination of health services research findings to public and private sector decisionmakers. Examples of NCHSR projects include those related to the accessibility, acceptability, planning, organization, distribution, utilization, quality, and financing of health services systems, health manpower, facilities and equipment, and the uses of computer science in health services delivery and medical information systems.

NCHSR Prevention Highlights

NCHSR Solicitation - Grants for Research on Health Promotion and Disease Prevention. In August 1980 the National Center for Health Services Research (NCHSR) and the Office of Health Information, Health Promotion, and Physical Fitness and Sports Medicine (OHP) published a grant solicitation on Health Promotion and Disease Prevention. The solicitation encourages research on specific strategies to improve individual health of Americans through the promotion of healthful lifestyles and the prevention of disease and injury. Particular emphasis is placed on the following areas of research: economic, political and social aspects; health education; and settings and manpower.

Health Hazard/Risk Appraisal Research. NCHSR is supporting efforts to assess existing health hazard/risk appraisal programs. The study characterizes the programs according to sponsorship, target populations, program structure and process, cost, and effectiveness. When completed, the study will be for use by State and local health planners, policy-makers, and health care professionals.

Cost Models: Cigarette Smoking. NCHSR is supporting the development of cost information related to cigarette smoking to assess the economic impact of various actions to reduce smoking. One study estimates the cost differential of providing medical care to smokers, former smokers, and nonsmokers. A second study appraises the social costs and benefits of antismoking policies such as smoking bans and media campaigns and their possible effects on tobacco-producing States. A third study examines the potential for using tax revenue to reduce smoking. The study results should be of use to policy-makers for planning antismoking programs.

National Center for Health Statistics (NCHS)

NCHS is the principal Federal source of health data used in planning health services and other programs that meet the health needs of the Nation. Working with State and local governments, the Center collects and analyzes the vital statistics of the Nation and conducts surveys of illness and disability and the use and availability of health services, resources, and manpower. The Center also conducts research on the development and evaluation of data collection systems and trains health administrators and statisticians.

NCHS Prevention Highlights

Health Practices Survey. In 1979 NCHS and the Office of Health Information, Health Promotion, and Physical Fitness and Sports Medicine conducted a two-phased national survey to determine the prevalence and stability of health practices. During the first phase of the study, approximately 3,000 telephone interviews representing a national sample of persons from 20 to 64 years of age were conducted during spring and summer 1979. Respondents were interviewed again in 1980 with virtually the same questionnaire. The results will yield information on the distribution and range of health habits, the relationships between health habits and health status, and the corresponding changes over time.

Public Health Conference on Records and Statistics. NCHS provides support to the biennial Public Health Conference on Records and Statistics. The August 1980 conference emphasized applications and uses of records and statistics in the areas of environmental and occupational health and health promotion efforts. Sessions were held on such topics as vital records, health promotion, and lifestyle factors; use of health records in health promotion efforts; statistical approaches to health promotion; and cost and benefits of prevention.

Prevention Profile. *Health, United States, 1980,* the fifth annual report to Congress on the health status of the Nation, contains a Prevention Profile. This profile, required every third year by Section 404 of the Health Services and Centers Amendments of 1978 (Public Law 95-626), provides a data base for assessing the implementation of disease prevention and health promotion programs. Prepared in cooperation with the Office of Disease Prevention and Health Promotion, the profile offers a mechanism for formally tracking the national measurable prevention objectives for 1990.

Office of Health Maintenance Organizations (OHMO)

The Office of Health Maintenance Organizations offers technical expertise and consultation to individual health maintenance organizations so that they can better fulfill responsibilities to their members by providing health education services, particularly with respect to what each member can contribute to maintaining his own health; information about HMO services and recommendations on the use of these services; and nutrition education and counseling.

OHMO Prevention Highlights

Physician Involvement in Prevention. Through technical assistance provided by OHMO, the Medical Director's Division of the Group Health Association of America, the members of which are prepaid group practice physicians, began to shift their meeting emphasis from administrative topics to a concern for service and prevention. As a result, the 1979 meeting focused on prevention of mental illness, the care of chronically ill patients, hospitalization, and the role of the mental health profession in promoting HMO member health and well-being. The 1980 meeting addressed health promotion and how to translate the current impetus toward promotion activities into effective HMO programs.

Preventive Services Demonstrations. With the OHP, the OHMO is cosponsoring two projects to demonstrate the effectiveness of the delivery of health promotion services in a clinical setting. One of these projects assesses the potential for reducing infant mortality by providing HMO-based prenatal counseling for high-risk pregnancies, and the other focuses on HMO-based counseling on the use of auto restraints.

Office of International Health (OIH)

OIH provides leadership, formulates overall policy, and assures coordination of the Department's international health activities. The Office is the official liaison agency of the United States in relationships with international health organizations, notably the World Health Organization (WHO) and the Pan American Health Organization (PAHO). OIH provides overall policy guidance in international health and promotes and coordinates participation of the PHS agencies in programs and activities related to binational health relationships with more than 20 countries.

OIH Prevention Highlights

Collaboration with WHO Chemical Safety Program. Efforts were initiated to collaborate with WHO's International Program on Chemical Safety, which is concerned with the evaluation of toxic chemicals in foods, work places, water, and air. The principal objective is to determine the stage of toxicity at which chemicals are harmful to human health. In the United States, this effort involves NIOSH, FDA, NIEHS, NCI, and EPA.

U.S.-P.R.C. Health Cooperation. Initial work plans were developed for several prevention-related activities under the Protocol signed in 1979 between the United States and the People's Republic of China. These plans include, among other activities, cooperation in new approaches to research on the epidemiology and control of influenza and exchange of information on the appearance of new strains of influenza virus, parallel investigations into causes of major cancers, and joint studies of incidence and mortality to help clarify the influence of host and environmental determinants of cancer. In 1980 the two countries agreed to add three new prevention-related areas to the program of cooperation—population research, mental health, and food and drugs. In the last area, for example, the United States is interested in receiving from the People's Republic of China information relating to her program for reporting adverse drug reaction.

U.S.-India Health Cooperation. In 1980 agreement was reached between United States and Indian health officials on expanding the program of health cooperation to include research directed toward prevention of nutritional blindness and other joint nutrition activities, such as United States-Indian workshops on evaluation of the nutritional status of the individual and of the nutritional effects of gastrointestinal infection. Cooperation is also being expanded in the field of reproductive physiology.

Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA)

The Alcohol, Drug Abuse, and Mental Health Administration is the Federal agency specifically mandated to prevent and reduce alcohol abuse and alcoholism, drug abuse, and mental and emotional illness. ADAMHA conducts and supports research into the causes of these diseases and disorders and develops new approaches for prevention and treatment. It finances training programs and supports a wide range of treatment and prevention activities in community centers. In 1979 prevention was established as the agency's fourth major priority, along with research, training, and treatment services.

ADAMHA Prevention Highlights

Prevention Division Established. The Office of the Administrator was reorganized in 1979 to establish a Division of Prevention within the new Office of Program Planning and Coordination. The Division coordinates all ADAMHA prevention activities, especially those of a cross-cutting nature. Working in concert with the NIAAA, NIDA, and NIMH, in 1979 the Division evolved a comprehensive long-range prevention policy for the agency through an in-depth examination of all ADAMHA prevention activities and related policies, with emphasis on those involving all three Institutes.

National Conference on Prevention. A national conference sponsored by ADAMHA was held in September 1979 to review identified prevention policy issues and to discuss prevention programming in the alcoholism, drug abuse, and mental health fields. The meeting was organized around three major themes: health promotion and disease prevention—opportunities and challenges; commonalities in ADM prevention programs for children and youth; and multicultural approaches in alcohol, drug abuse, and mental health prevention programs. The second national ADAMHA conference on prevention is scheduled to focus on ADM prevention at the worksite.

Project Sleep: National Program on Insomnia and Sleep Disorders. Two reports, one by the National Institute on Drug Abuse in 1977 and another by the Institute of Medicine of the National Academy of Sciences in 1979, recommended that the Federal government undertake an education program to improve physician and patient knowledge and practice in the use and misuse of sedative-hypnotic drugs and about the diagnosis and treatment of sleep disorders. In December 1979 the Surgeon General announced a three-year education and research program, Project Sleep, including state-of-the-art and scientific consensus development conferences; additional research;

development of medical school curricula; materials for continuing medical education; a Surgeon General's Advisory on the use of hypnotic drugs; patient brochures containing the latest medication information for distribution in doctors' offices and pharmacies, and dissemination of information to the general public.

National Institute on Alcohol Abuse and Alcoholism (NIAAA)

The long-range goal of the National Institute on Alcohol Abuse and Alcoholism (NIAAA) is prevention of alcoholism through effective programs, including public education about the public health aspects of alcohol use. A short-term goal is the provision of quality treatment and rehabilitation services in communities. NIAAA supports research, training, and education programs designed to identify causes of alcohol problems and methods to prevent or treat alcoholism. The Institute's major facility for collecting and disseminating data is the National Clearinghouse for Alcohol Information (NCALI).

NIAAA Prevention Highlights

NIAAA Public Education Campaign. In 1977 NIAAA developed a media/evaluation program to create, disseminate, and assess the effect of materials bearing on alcohol problems, including the effects of alcohol on fetuses. These materials were directed toward women of childbearing age and youth, in an effort to influence their behavior related to drinking while driving. Elements of the program include problem analysis, audience assessment, development and testing of concepts and messages, and the production of media materials for television and publication. The Institute is now evaluating how the materials affect target audiences and the dissemination methods used.

Symposium on State Drinking Age Laws. Recently a number of States have raised, or considered raising, the legal drinking age. To explore the potential effects of changes in drinking age laws, to review current information on the subject, and to recommend directions for future research and action, NIAAA and the Medical Foundation cosponsored by 1979 a multidisciplinary symposium on drinking-age laws. Another NIAAA symposium examined the subject of children of alcoholic parents.

"Here's Looking At You" Curriculum. Sponsored by NIAAA, the King County, Washington, Alcohol Education Curriculum Project produced a field-tested school curriculum for Grades kindergarten through 12, to be used alone or integrated with existing curricula. The program includes a detailed teacher's guide, *Here's Looking At You,* and accompanying kits for each grade level containing films, charts, instructional games, and puppets. About 15 hours of classwork at each grade level are outlined in the teacher's manual. The curriculum emphasizes primary prevention and combines alcohol information with exercises designed to enhance coping and decision-making skills together with clarification of values and attitudes.

Prevention Model Replication Program. NIAAA's Division of Prevention is implementing a plan to replicate three alcohol abuse prevention models directed toward youth, based on the results of three-year demonstration grants funded by NIAAA's Youth Education Branch. The three prevention models are the University of Massachusetts Alcohol Education Project in Amherst; the King County, Washington, ESD #121 Alcohol Education Curriculum Project; and the CASPAR Alcohol Education Program of Somerville, Massachusetts. Under this replication program, eight State alcoholism programs have been selected, through the grant mechanism, to work with NIAAA in field testing the adaptability and replicability of the three original models. The findings from this replication effort will determine future dissemination of the workbooks and information about additional programs.

Prevention Publications. In 1979 the NIAAA published a compilation of alcoholism-prevention literature entitled *Alcoholism Prevention Guide to Resources and References.* As a contribution to the International Year of the Child, NIAAA published a booklet, *Is Beer a Four-Letter Word?,* consisting of suggested activities to be implemented by teenagers in their schools and communities.

National Institute on Drug Abuse (NIDA)

The National Institute on Drug Abuse (NIDA) funds local prevention and treatment projects and has initiated an outreach program. NIDA supports research on the factors that contribute to the misuse of drugs, trains workers in prevention and rehabilitation, and explores new approaches to prevention through education. The Institute's National Clearinghouse for Drug Abuse is a center for the collection and dissemination of data about this subject. The

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primary goal of NIDA's prevention strategy is to reduce or prevent drug abuse by fostering positive human development. NIDA's short-term program objectives are to develop, demonstrate, and disseminate effective prevention strategies and to strengthen State and local capacities to deliver prevention services.

NIDA Prevention Highlights

State Drug Abuse Prevention Grant Program. Virtually every State and territory now receives a NIDA grant to carry out prevention activities under the State Drug Abuse Prevention Grant Program (SPG). In each participating State or territory, a prevention coordinator supervises program planning, implementation, and evaluation. State prevention coordinators provide technical assistance and disseminate prevention materials and techniques to communities, and collaborate in establishing a network through which States can share information and technical assistance. In 1980, the program was expanded to include a parent/family component. States can now apply for prevention service money to enable them to provide support to communities. The SPG also permits States to apply for support to activities to stimulate programs that stress innovative, cost-effective prevention strategies.

The Center for Multicultural Awareness. The Center for Multicultural Awareness (CMA) responds to the need for developing prevention materials and programs tailored to the needs of ethnic minority groups. These groups include Asian/Pacific Islanders, Blacks, Mexican Americans, Indians, and Puerto Ricans. CMA provides technical assistance to single State authorities and American Indian tribal entities, develops drug prevention materials, provides translation services, conducts workshops in multicultural drug abuse prevention, and advises NIDA on minority issues and drug abuse prevention strategies. The National Clearinghouse for Drug Abuse Information disseminates the materials CMA produces.

National Drug Abuse Convention Campaign. In 1979 NIDA developed broadcast and print media materials, including two public information pamphlets—*A Woman's Choice: Deciding About Drugs* and *Say No: Drug Abuse Prevention Ideas for the Classroom.* The latter is intended for seventh and eighth-grade teachers; both are available from the National Clearinghouse for Drug Abuse Information. Two television announcements and four radio spots, aimed at youth aged 12 to 14 and women aged 18 to 24, were distributed to State agencies concerned with drug abuse. These materials were prepackaged so that States could distribute them to local broadcasters for airing in 1979 and 1980.

National Institute of Mental Health (NIMH)

The National Institute of Mental Health (NIMH) conducts and supports research into the causes, prevention, and treatment of mental and emotional disorders. Special areas of research are schizophrenia, severe depression, child mental health, mental health aspects of crime and delinquency, minority group mental health, metropolitan problems, mental health of the aging, and psychopharmacology. NIMH trains mental health workers, distributes mental health information, and collects and disseminates relevant statistical data.

NIMH Prevention Highlights

Prevention Research Funds. In 1980 NIMH committed $4 million for prevention research funds. The Office of Prevention, within the Office of the Director of the Institute, had lead responsibility for planning and implementing the prevention research program. A Prevention Advisory Group composed of representatives from all NIMH Divisions provided consultation to the Office of Prevention. A total of 34 research grants, 6 Interagency Agreements, and 2 contracts were supported with these funds. Areas of emphasis included the impact of marital disruption on children, the impact of severely disturbed parents on children, stress, and minorities. Plans for the future extend to including research projects in the area of high-risk depression.

Prevention Grants for Child Mental Health. NIMH supported seven grants in FY 1980 submitted in response to a special announcement for applications in the area of the impact of marital disruption on children. In addition, six grants were supported to investigate the effect on children of severely disturbed parents.

Centers for Disease Control (CDC)

The major goal of the Centers for Disease Control (CDC) is to lead public health efforts to prevent unnecessary disease, disability, and death. CDC pursues this goal through intermediate outcome goals—prevention and control of infectious disease; prevention of disease, disability, and death associated with environmental and workplace hazards; prevention and control of chronic diseases; and the promotion of health. In addition, CDC provides support to local, State, academic, national, and international efforts in disciplines basic to prevention—epidemiology, laboratory sciences, health education, and training.

CDC Prevention Highlights

Reorganization. In October 1980, DHHS completed a reorganization of the components of the CDC to facilitate a more effective response to the health problems of the 1980s. The name of the Center was changed to the Centers for Disease Control, and six operational units were established: the Center for Environmental Health, the Center for Health Promotion and Education, the Center for Prevention Services, the National Institute for Occupational Safety and Health, the Center for Professional Development and Training, and the Center for Infectious Diseases. The descriptions for CDC highlights are arranged according to the old organization; however, the changes under the reorganization are noted for each section.

Model Standards for Community Preventive Health Services. By developing realistic community-specific objectives, State and local health agencies can establish their priorities for addressing critical public health problems. To assist these planning efforts, a document entitled "Model Standards for Community Preventive Health Services" was developed cooperatively over a two-year period by CDC, the American Public Health Association, the Association of State and Territorial Health Officials, the National Association of County Health Officers, and the U.S. Conference of City Health Officers. Early in FY 1980, the Secretary of DHHS transmitted the model standards document to the Congress. Five states have used the model standards for such purposes as program planning, performance-based funding of local services, and evaluation. CDC has awarded two evaluation contracts to assess both State and local negotiations to agree on quantitative targets for community objectives and subsequent success in reaching these targets.

Bureau of Epidemiology

The Bureau of Epidemiology maintains surveillance over communicable diseases and certain preventable conditions of national importance, and develops programs of international surveillance in collaboration with the Office of International Health, the Agency for International Development, the Department of Defense, the Department of State, the World Health Organization, and the Pan American Health Organization. This Bureau conducts the national quarantine program, investigates special disease problems, participates in the evaluation of experimental vaccines, provides epidemic aid to States and foreign countries, and recruits and trains public health epidemiologists. Under the reorganization, the functions of the Bureau of Epidemiology are assumed by the new Epidemiology Program Office and the Centers for Prevention Services, Environmental Health, and Infectious Diseases.

Bureau of Epidemiology Prevention Highlights

Studies of Radiation Carcinogenesis and Nuclear Bomb Testing. The Bureau is assessing the connection between radiation and cancer through a continuing study of military personnel present at the 1957 atmospheric nuclear bomb detonation during test "Smokey" in Nevada. Initial findings of excess leukemia were published in 1980 (JAMA, October 3, 1980). A study has been completed, in cooperation with the University of Utah, of populations in southern Utah that were exposed to fallout from atmospheric nuclear testing at the Nevada test site. This fallout may have caused increased exposures in downwind areas.

Study of Human Exposure to DDT. CDC and other agencies are conducting a combined epidemiologic/laboratory/field study of human exposure to DDT residues in Triana, Alabama, associated with consumption of highly contaminated fish. Serum levels of DDT in a number of lifelong residents were much higher than normal. Subsequent studies documented contamination from another very toxic chemical, PCB. Environmental testing showed the river to be highly contaminated.

Polio Containment in Amish Communities. In 1979, CDC reacted to the spread of poliomyelitis from the Netherlands through Canada to the United States by stimulating control efforts. This effort successfully limited the 1979 outbreak of polio in the United States to only 15 cases. All the victims in these cases were unvaccinated Amish, and a vaccination program was initiated in Amish communities in 23 states. In 1980, after the vaccination program, no additional cases were found.

Study of Contraceptives and Risk of Cancer. Because almost 20 million American women have used oral contraceptives, in 1980 CDC initiated a program in cooperation with NIH to determine whether the hormonal agents in contraceptives influence a user's risk of breast, endometrial, or ovarian cancer. The long-term study is designed to document the incidence rates of these cancers among groups of women in relation to use or nonuse of oral contraceptives.

Microbiologic Guidelines for Hemodialysis Centers. In 1979, collaborating with NIH, FDA, and the Health Care Financing Administration (HCFA), CDC recommended microbiologic guidelines for hemodialysis centers. The purpose of the guidelines is to eliminate pyrogenic reactions—one of the most common complications of dialysis. CDC provides laboratory and epidemiologic support to the States in investigating outbreaks of these reactions and is now testing newly developed disinfectants designed specifically for hemodialysis systems.

Test for Hepatitis A. From 670,000 to 3,350,000 cases of Hepatitis A occur in the United States annually. Specific diagnosis of Hepatitis A is now possible by a serologic test developed by CDC, using a single blood specimen to measure the presence of a virus-specific IgM antibody. In 1980 this test became available as a commercial test used to determine those populations at risk of contracting hepatitis, including infants and children in day-care centers, a population that probably accounts for more than one half of the Hepatitis A in certain areas.

Hepatitis B Vaccine. CDC is evaluating a prototype Hepatitis B vaccine and has recommended measures to control the spread of Hepatitis B in high-risk health care environments, including hemodialysis centers and dental operatories, as well as recommendations for the sterilization and disinfection of patient care equipment such as endoscopes. The vaccine trial—a joint effort by the FDA Bureau of Epidemiology and State Services—was initiated in FY 1980. The FDA Bureau of Biologics will review the results in determining licensing of the new vaccine.

Diabetes Control Project. CDC developed an innovative prevention program to reduce complications, hospitalization, and premature death through improved availability of diabetes education care. Diabetics are more than twice as susceptible as nondiabetics to coronary heart disease and stroke, show an almost 40-fold higher amputation rate, are hospitalized 2.5 times more frequently, and have longer average hospital stays. The current diabetic population exceeds 5.5 million persons. CDC personnel, together with State health agencies, are guiding demonstration projects funded in 20 States to reduce the problems associated with diabetes through the use of surveillance, epidemiologic studies, health planning, program evaluation, and resource coordination. Analysis of disease trend data will help each State measure its progress toward a concrete reduction of diabetes-associated illness and death.

Bureau of Health Education (BHE)

The Bureau of Health Education (BHE) sponsors a comprehensive national program for deployment of health education measures to prevent disease, disability, premature death, and undesirable and unnecessary health problems. Working with and through the regional offices, the BHE encourages and assists in the broader application of effective health education programs at the State and community levels. The BHE also develops mechanisms for enhancing health education activities of the private sector; participates in, and provides staff support for, the Intradepartmental Health Education Board; and maintains liaison with other Federal agencies and with public and private organizations engaged in health education activities. Under the reorganization, the Bureau of Health Education is incorporated into the new Center for Health Promotion and Education.

BHE Prevention Highlights

School Health Education Models. BHE has developed, tested, and distributed nationally two models of health education for youth in kindergarten and Grades 1 through 7. These models employ the latest education resources and methods to help schoolchildren understand their bodies and appreciate how lifestyle, attitude, and behavior can either promote good health or contribute to disease. One model, the School Health Curriculum Project (SHCP), was first developed in the early 1970s and is presently used by 5,350 teachers of Grades 4 to 7. CDC has initiated a three-year study to compare the effectiveness of SHCP with that of three other school health education programs.

Risk Reduction Grants. In September 1979 CDC initiated a program of grants to help State health agencies conduct health education programs aimed at reducing preventable death and disability associated with cigarette smoking, obesity, alcohol abuse, high blood pressure, and other factors contingent on individual behavior. The States established liaisons with organizations and groups conducting risk reduction activities and, as an aid to program evaluation, developed systems to survey the prevalence of risk factors associated with chronic and preventable diseases. Grants were made in 47 states. In 1980 CDC received more than 600 grant applications from State and local agencies and expanded the funding of risk reduction programs at the community level. The 1980 program provides that the majority of these funds support projects to deter smoking and alcohol use by youth. The guidelines for this grant program and review of applications were conducted in cooperation with the Office on Smoking and Health; the Office of Health Information, Health Promotion and Physical Fitness and Sports Medicine; and the National Institute on Alcohol Abuse and Alcoholism.

Bureau of Laboratories

The Bureau of Laboratories administers a comprehensive national laboratory improvement program. Its responsibilities include conducting both research aimed at improving laboratory methodology and a program to standardize clinical laboratory methods and materials. The Bureau aids in disease prevention by providing consultation, training, and information services in laboratory techniques and management to States and other recipients, and consultation and epidemic aid in the area of vector-borne infections to State, Federal, and international agencies. Under the reorganization, the Bureau of Laboratories is incorporated into the Laboratory Improvement Program Office and the Centers for Environmental Health and Infectious Disease.

Bureau of Laboratories Prevention Highlights

Legionnaires' Disease. In 1979 use of standard techniques led to the identification of the bacterial cause, *Legionella pneumophila,* or Legionnaires' disease, a type of pneumonia. The Bureau of Laboratories and the Bureau of Epidemiology collaborated in the search, which also led to the recognition of atypical *Legionella*-like organisms (ALLO), a group of bacteria that cause pneumonia in humans. Research on the antigenic structure of the Legionnaire organism has resulted in the isolation and purification of immunizing factors that have successfully protected animals given a lethal dose of the organism. Techniques for rapid diagnosis have been developed, and evidence is growing that the use of erythromycin is an effective treatment of the disease.

Botulism Detection. Collaborative efforts of the Bureau of Laboratories and the Bureau of Epidemiology have improved laboratory technology for the detection of botulism to increase the accuracy of diagnosis from 33 percent to 87 percent. Recognition of infant botulism as a clinical entity in 1976 was largely a result of perfecting the methods for copreexamination for botulinal toxin and *Clostridium botulinum.* More than 100 cases of infant botulism have been confirmed in the United States, and cases are now being diagnosed in

other countries. The sudden infant death syndrome (SIDS) is an important cause of infant death for which no apparent cause has been detected. Preliminary data from studies conducted in Washington and California suggest that about 5 percent of SIDS may be caused by botulism. A systematic study is under way to determine further the relationship between infant botulism and SIDS in the United States.

Schistosomiasis Drug. A safe and effective antischistosomal drug has never been available to clinicians in the United States and Puerto Rico. Oxamniquine is a promising agent that may fulfill the requirements of efficacy and minimal toxicity for broad usage. In collaboration with the University of Puerto Rico School of Medicine in 1979, the Bureau of Laboratories initiated a double-blind clinical trial of the efficacy of oral Oxamniquine in the treatment of patients (30 adult males, 17 years of age or older) with chronic Manson's schistosomiasis. In 22 patients treated so far, *Schistosoma mansoni* egg counts were reduced by more than 95 percent, one month after treatment. After three months, all patients receiving Oxamniquine had ceased to excrete *S. mansoni* eggs. Side effects have been minimal and well tolerated in all instances. On the basis of these results, it is expected that an available, safe, and effective medicament will be approved for treatment of individuals in this country infected with *S. mansoni.*

Bureau of Smallpox Eradication (BSE)

The Bureau of Smallpox Eradication (BSE) has in the past directed and coordinated the surveillance of smallpox and smallpox vaccinations within the United States, as well as directed, coordinated, and managed United States participation in the worldwide program for eradication of smallpox. With the eradication of smallpox, the Bureau now principally designs public health programs based on techniques and methodologies developed in smallpox eradication activities. Its Research and Development Division develops field tests and makes recommendations on the adoption of new and improved procedures to assist developing countries in improving their public health programs. In addition, the Division plans, conducts, and evaluates research activities in various aspects of disease control for immunization programs. Under the reorganization, the functions of the Bureau of Smallpox Eradication are assumed by the International Health Program Office and the Center for Health Promotion and Education.

BSE Prevention Highlights

Eradication of Smallpox. The World Health Organization (WHO) certified the eradication of smallpox in the Horn of Africa (Somalia and southeastern Ethiopia) in October 1979, marking the first two-year period in recorded history during which there was no endemic transmission of the disease in that region. CDC provided long- and short-term epidemiologic consultants to WHO's worldwide campaign to eradicate smallpox. Staff members participated in the formal WHO certification process in 1979 by serving on teams visiting the Horn of Africa to ensure continuing absence of the disease. This program is described in greater detail in Chapter 1.

Detection of Iron Deficiency. BSE is assessing the laboratory criteria to document, within defined economic and social groupings, the therapeutic response to iron deficiency in one-year-old infants. This study is expected to identify the most cost-effective methods of screening infants for iron deficiency and to improve the planning and administration of food supplementation programs. The results of this investigation will also expand present knowledge supporting clinical nutritional approaches to reducing infant health risks and enhancing CDC's capability to provide technical assistance in this area.

Bureau of State Services

The Bureau of State Services has been responsible for planning, directing, and coordinating a national program for assistance to State and local health agencies in the prevention, control, and eventual eradication of serious infectious diseases—such as gonorrhea, measles, poliomyelitis, rubella, syphilis, and tuberculosis—for which specific preventive measures are available. It also administers programs for the control of environmentally induced human health problems, conducts research relative to health problems within its concern, and provides assistance in analyzing the influence of various factors such as socio-economic status, nutritional status, and demographic characteristics on the incidence and severity of preventable diseases. Under the reorganization, the programs of the Bureau of State Services are transferred to the Centers for Prevention Services and Environmental Health.

Bureau of State Services Prevention Highlights

STD Training Clinics. With the expanding knowledge about sexually transmitted diseases (STD) and the documented need to improve general clinical competence among private and public health care providers, CDC seeks to improve clinical care skills among health practitioners and providers of health care services. One approach to achieving this aim has employed production of publications and sponsorship of medical symposia. To emphasize prevention, CDC has cosponsored a major International Symposium on Pelvic Inflammatory Disease, one of the most common complications of gonorrhea. CDC has also established six regional STD Training/Prevention Clinics. Housed within public health facilities in Chicago, Cincinnati, Dallas, Denver, Los Angeles, and Seattle, these clinics utilize the teaching talents of public health practitioners and medical school faculty members to provide experimental training in the multiple disciplines involved in STD clinical care.

Fluoridation Initiative. Because fluoridation of water supplies is an important means of decreasing tooth decay, in 1979 CDC established a fluoridation project grant program to provide financial and technical assistance to States and communities. These grantees have initiated the fluoridation of approximately 45 water system serving an estimated 400,000 people in small communities with populations under 25,000. The water supplied to 60 rural schools serving approximately 20,000 students was also fluoridated. The program was expanded in 1980, and by the end of 1980, an estimated 4.26 million additional people were receiving the benefits of fluoridation. CDC has provided technical assistance to grant applicants and other communities preparing for hearings, referenda, or litigation about fluoridation.

Childhood Immunizations. In 1977 the President initiated a nationwide campaign to increase childhood immunization levels and to establish a follow-up system to ensure that immunization series for newborns be completed at the appropriate age. All States now require immunizations as a condition of school entry. By October 1979, the immunization goal for schoolchildren was reached; 91 percent of schoolchildren in kindergarten through eighth grade were immunized against measles, polio, diphtheria, tetanus, and pertussis. As a result, the incidence of childhood diseases preventable by immunization has declined dramatically. The number of reported cases of measles, rubella, and mumps was substantially lower for the first 43 weeks of 1980 than for the same period of 1977—a 76 percent decline for measles, 82 percent for rubella, and 58 percent for mumps. A goal was established in 1980 to eliminate indigenous measles in the United States by October 1, 1982.

Influenza Immunization. The people most at risk for influenza complications, including death, are the chronically ill and the elderly. To immunize these populations, CDC awarded grants for FY 1979 to 42 states, the District of Columbia, 2 territories, and 6 local areas. In all, 3.9 million doses of influenza vaccine were made available for these immunization projects from 1978 through 1980. CDC continued to provide technical assistance to more than 60 grantees in planning influenza immunization programs.

Bureau of Training

The Bureau of Training is the primary source of expertise in the field of instructional/performance technology within CDC. The Bureau assists disease prevention and control programs at the local, State, national, and international levels to reduce unnecessary morbidity and mortality that may result from the failure to apply existing scientific, technical, or operational knowledge. Specifically, the Bureau conducts a program to update and improve the performance of practicing health professionals in the methods and techniques of disease prevention and control; promotes the establishment, maintenance, and improvement of State and other health training programs; provides disease control training and consultation on natural disasters and epidemics; develops and advises on advanced training technology and methodologies through the above activities; and coordinates the Center's training activities. In 1979 and 1980, technical assistance, consultation, and instructional resource materials were provided to more than 500 organizations. Under the reorganization, the Bureau of Training becomes the Center for Professional Development and Training.

Bureau of Training Prevention Highlights

Training for Immunization Program Managers. The director of the World Health Organization's Global Programme has emphasized training and planning for immunization efforts. At his request, CDC has developed a senior-level course for national program managers that has been attended by more than 400 managers of developing countries with immunization programs, and has

designed mid-level management training for managers of immunization programs throughout the world. CDC has made planning assistance available worldwide and at regional and national levels.

Bureau of Tropical Diseases (BTD)

The Bureau of Tropical Diseases (BTD) directs a program of research and investigation of vector-borne and tropical diseases, such as Chagas' disease, onchocerciasis, shigella, malaria, and other parasitic diseases. The BTD develops and evaluates methods, including insecticidal and biological control measures, of the insector vectors and the diseases they transmit; it conducts investigations on the bionomics of insect vectors, and researches the host parasite relationship of such diseases. Through interrelated laboratories in the United States and the tropics, BTD provides assistance to other scientific, educational, and health organizations in developing competencies in the epidemiology and control of tropical and vectorborne diseases. In addition, the Bureau collaborates with, and provides technical consultation to, other United States government agencies and international organizations in the development, evaluation, and application of control measures. Under the reorganization, the programs of the Bureau of Tropical Diseases become part of the Center for Infectious Diseases.

National Institute for Occupational Safety and Health (NIOSH)

The goal of NIOSH is to assure safe and healthful working conditions for every working man and woman in the United States. To that end, NIOSH plans, directs, coordinates the national program to develop and establish occupational safety and health standards and to conduct research, training, technical assistance, and related activities. The Institute seeks to develop innovative methods and approaches to deal with occupational safety and health problems, and to provide medical criteria to ensure the protection of employees from diminished health, functional capacity, or life expectancy because of work experience. NIOSH consults with other Federal agencies, State and local government agencies, and industry and employee organizations to effect progress in occupational safety and health.

NIOSH Prevention Highlights

Criteria Documents and Health Hazard Evaluations. One of the most important prevention efforts by NIOSH is the development of criteria documents that, for a given hazard recommend environmental exposure limits, medical examination requirements, labeling and warning, environmental monitoring methods, engineering controls, workplace practices, personal protective equipment and clothing, and record-keeping requirements. Criteria documents have an effect on the workplace even before being promulgated as standards. Labor and industry use them as guides for control of hazards even though the documents do not have the force of law. In FY 1980, 12 criteria documents were completed, and others were initiated. NIOSH also began producing health hazard evaluations, which are briefer than criteria documents and are designed primarily to review the state of knowledge about the health effects of a particular substance, process, or industry. NIOSH completed 132 health hazard evaluations in FY 1979, and 167 in FY 1980.

Educational Resource Centers (ERCs). The NIOSH training grant program now includes 33 training project grants and 12 Educational Resource Centers (ERCs), which are strategically located to serve each region of the country. In 1980, the program provided academic education for approximately 2,000 degree candidates in the fields of industrial hygiene, occupational safety, occupational health nursing, occupational medicine, and other related disciplines (toxicology, epidemiology, ergonomics, and biostatistics).

Food and Drug Administration (FDA)

FDA is the regulatory agency responsible for assuring that all foods, drugs, cosmetics, and medical devices used or consumed by the public are safe, sanitary, properly labeled, and effective. FDA tests new drugs, food additives, and certain medical devices before they are marketed, and conducts inspections of related manufacturing and processing plants. The agency issues public warnings when hazardous products are identified, and it is empowered to remove unsafe products from the market. FDA is authorized to initiate legal action in the event of misleading labeling. FDA's program activities are distributed among six bureaus—the Bureau of Drugs, Bureau of Foods, Bureau of Biologics, Bureau of Radiologic Health, Bureau of Veterinary Medicine, and Bureau of Medical Devices—as well as the National Center for Toxicological Research.

FDA Prevention Highlights

Nutrition Education Materials. To promote good health through knowledge of nutrition, FDA contracted in 1978 with the University of North Carolina to develop a model course in applied nutrition for health professional students who would participate both in classroom instruction and in clinical care of community patients. Thirty-five of the 45 classroom sessions were designed as self-instructional programs, and a curriculum guide was developed for faculty members and for other health professionals who might wish to conduct a similar course. Now in its third year, this program aims to evaluate the existing test components of the course in order to expand them for development of a manual of test materials to be used nationally and interchangeably with the self-instructional program.

Bureau of Biologics

The regulation of biological products is the responsibility of FDA's Bureau of Biologics. Regulated products include polio and measles vaccines, diphtheria and tetanus toxoids, skin test substances, and whole blood for transfusions. Since most biological products are derived from living organisms, they are by their nature potentially dangerous if improperly prepared or tested. Therefore, the Bureau of Biologics tests many of these products before their release by the manufacturer for general use. Because biologics are legally defined as "drugs," the Bureau ensures that all biological products meet the requirements for safety and effectiveness prescribed by the Public Health Service Act and appropriate sections of the Food, Drug, and Cosmetic Act.

Bureau of Drugs

Medicines are an FDA responsibility assigned to the Bureau of Drugs. The Bureau must approve all new drugs for safety and effectiveness before they can be sold to the public. Approval is based on extensive scientific data and test results submitted to the Bureau by the organization seeking authorization to market the drug (normally the drug's manufacturer). The manufacturer must demonstrate its ability to manufacture high-quality products. The Bureau is also concerned with proper drug labeling and requires that labels contain adequate warnings and directions for use.

Bureau of Drugs Prevention Highlights

Patient Package Inserts. FDA proposed a requirement that most prescription drugs have package inserts to inform consumers about the appropriate uses of the drug, possible side effects, and

proper procedures for administering the drug. By means of this requirement, the Bureau aims to ensure the safe and effective use of drugs and to encourage patients to participate more actively in their personal health care problems. Effective October 14, 1980, final regulations require package inserts, written in nontechnical language, to be prepared and distributed by the manufacturer. The Bureau intends to make these regulations effective for 10 drugs or drug classes during an initial three-year period.

Prescription Drugs: National Consumer Education Campaign. FDA has initiated a comprehensive campaign to educate consumers about the safe and effective use of prescription drugs. A major theme of the campaign is the hazards inherent in an "overmedicated society." Included are television and radio public service announcements, in English and Spanish. FDA has secured the aid of health professionals to encourage dialogue between physicians and patients and between consumers and pharmacists. The campaign is being coordinated with activities of the National Institute on Drug Abuse.

Fetal Alcohol Syndrome: National Consumer Education Campaign. Babies born to mothers who drink excessively during pregnancy suffer physical and mental defects including slow growth before and after birth, head and facial irregularities, defective organs, malformed limbs, mental retardation, and other abnormalities. In cooperation with the National Institute on Alcohol Abuse and Alcoholism and the Bureau of Alcohol, Tobacco, and Firearms, the FDA has cooperated in a program initiated in May 1978 to alert the public, especially pregnant women, to the potential health hazards that alcohol poses for unborn children. Among the elements of this continuing campaign are public service announcements that have been delivered to radio and television stations across the country and relevant articles published in FDA journals and distributed nationwide.

Darvon: National Educational Effort. In response to recent discoveries of certain risks associated with the use of the drug Darvon (propoxyphene), FDA issued a special *Drug Bulletin* in 1979 to alert physicians, pharmacists, dentists, and other health professionals about these risks. An article on the subject was printed in *FDA Consumer,* available to the public through the Consumer Information Center. FDA ordered a major new boxed warning about Darvon in 1979 to discourage unnecessary use and to promote care in prescribing the drug. In 1980 FDA requested that physicians write "no refill" on prescriptions and that they prescribe the drug only in writing. Recent information indicates an increase in physician and patient awareness of the potential for abuse of propoxyphene and a concurrent reduction in the number of prescriptions and in deaths and emergency room visits occasioned by abuse of the drug.

Poison Control Program. FDA directs a national program of activities related to accidental poisonings. As a part of this effort, FDA assists local prevention and treatment activities in such ways as providing educational materials and scientific data on the toxicity of drugs and other chemicals. Each year FDA participates in National Poison Control Week, an effort to focus public attention on this important public health problem.

Bureau of Foods

The Bureau of Foods conducts research, maintains data, and develops regulations and standards on the composition, quality, nutrition, safety, and purity of foods, food additives, colors, and cosmetics. The Bureau also has the responsibility of checking labeling and packaging for accuracy. Effective food labeling can contribute to the Nation's health by helping consumers choose foods with the appropriate caloric and nutrient values. Because advances in technology have created more processed and fabricated foods, and because the relationship of nutrition to certain diseases is becoming better understood, accurate and informative labeling about a product's nutrient content and its other characteristics has even greater public health significance now than in the past. Furthermore, disease and other abnormal psychological conditions such as allergies compel many Americans to follow special diets. These people especially need informative food labeling. FDA is working with the food industry to promote voluntary listing of nutrition information on labels.

Bureau of Foods Prevention Highlights

Food Labeling Revisions. The FDA, the United States Department of Agriculture (USDA), and the Federal Trade Commission (FTC) announced in the *Federal Register* on December 21, 1979, their tentative positions on a variety of food labeling issues. The positions were the result of the agencies' analyses and evaluations of written and oral comments received in response to a notice published in the *Federal Register* on June 9, 1978, requesting the public's views on several food labeling issues. The FDA, USDA, and FTC held public hearings across the country between August and October 1978 to elicit public comments on improving food labeling, after which they accepted written submissions. These positions also reflect the results of FDA's Consumer Food Labeling Survey, conducted in the autumn of 1978, to gather consumer's views on food labeling.

Food Additives: National Consumer Education Campaign. To provide the consumer with a better understanding of food additives, the FDA created a slide presentation and published a series of illustrated articles in the *FDA Consumer* listing the different kinds of food additive, their uses, and how to identify them on food labels, including a discussion of their histories and legal status. These materials have been reprinted and distributed nationally through FDA's Consumer Affairs Office and the Consumer Information Center.

Saccharin and Cancer Study. In 1979 FDA and the National Cancer Institute released the preliminary findings of an epidemiologic study that examined the relationship between the use of the artificial sweeteners saccharin and cyclamate and the incidence of bladder cancer in humans. The study was prompted by the findings that saccharin was a weak carcinogen in laboratory animals. Preliminary results, involving almost 9,000 people in five states and five metropolitan areas, indicated no increased risk of bladder cancer among users of artificial sweeteners in the overall study population. However, there was some evidence that artificial sweetener consumption may be hazardous to heavy users (six or more servings a day of a sugar substitute or two or more 8-ounce diet beverages a day) of artificial sweeteners.

Infant Formula Quality Control Procedures. The identification of health hazards associated with chloride-deficient, soy-based infant formulas prompted FDA in 1979 to review quality control procedures to assure that deficiencies or other hazardous conditions will not occur in the future. In that year one manufacturer produced infant formulas having insufficient chloride. The feeding of this inadequate formula resulted in a substantial number of cases of hypochloremic metabolic alkalosis in infants. Congress has recently passed, and the President has signed, an amendment to the Food, Drug, and Cosmetic Act stipulating, among other things, than an infant formula be called adulterated if it does not meet the quality factor requirements established by the Secretary of DHHS.

Nitrosamines in Alcoholic Beverages. The United States Brewers Association (USBA) informed the FDA in 1978 that German researchers had reported finding low levels of dimethylnitrosamine (DMNA) in beer. The FDA and USBA each surveyed beers and other malt beverages available in the United States and reported similar findings. Based on information from the Germans and subsequent investigations by the USBA, it is apparent that DMNA formation occurs principally during the kilning (drying) of sprouted barley used in the production of barley malt. Although other techniques are under experimentation, the USBA has reported that sulfur is being used during kilning for most barley malt currently produced in the United States; as a result, levels of DMNA are substantially lowered. Consequently, the level of DMNA in beverages produced from those malts should also be substantially reduced.

Warehouse Sanitation Industry Education Program. The Atlanta regional office piloted an industry education program on warehouse sanitation in FY 1980. Seven workshops were held for the food warehousing industry to explain to the industry Federal requirements for safe storage of dood products. Other workshops are planned for FY 1981 in the Boston, Hartford, New York, and Newark districts. A slide show has been reproduced in English and Spanish and distributed to all the FDA district offices.

Bureau of Medical Devices

The Bureau of Medical Devices develops policy, promulgates standards, and evaluates the safety, efficacy, and labeling of medical devices. The Bureau conducts research and testing related to medical devices and collects and evaluates data about significant hazards to the public health that may be caused by the use of these instruments. The goal of the Bureau is to educate consumers to participate effectively in their own health care and protect themselves from ineffective, unsafe, or deceptive products.

Bureau of Medical Devices Prevention Highlights

Intrauterine Devices (IUDs). Approximately 15 million women throughout the world and up to 6 million women in the United States use IUDs. These devices can cause in those who use them side effects and adverse reactions including anemia, blood poisoning, embedment, perforation of the uterus, and septic abortion. A review of IUD labeling in 1974 revealed that this information was not being uniformly supplied to physicians or women patients. As a result, the Intrauterine Contraceptive Devices Professional and Patient Labeling final rule was published in May 1977. In FY 1980 funds were used in an FDA consumer education program about IUDs to provide exhibits, consumer articles, consumer memos, and regulation references to the public.

Bureau of Radiological Health

The Bureau of Radiological Health is responsible for the protection of the public against the hazards of radiation. It conducts research into the

health effects of radiation exposure and establishes standards and controls for safe radiation limits.

Bureau of Radiological Health—Prevention Highlights

Diagnostic X-Rays: Consumer Education. Reducing patient exposure to radiation from X-rays is the goal of a national campaign initiated by the FDA in March 1980. The program emphasizes education and motivation of the public to reduce the risks of diagnostic radiation. Radio public service announcements and cooperative programs with professional and consumer organizations, hospitals, and secondary schools are currently bringing consumers the following messages: Keep records of X-ray examinations; inform medical personnel about possible pregnancy; inquire about gonad shielding; and do not insist on having X-ray examinations. It is anticipated that the initiative will encourage State agencies, professional organizations, and health facilities to begin or expand their own education programs.

Criteria for X-Ray Examinations. A major cause of unnecessary X-ray examinations is a lack of scientific data to guide clinicians in deciding when X-ray procedures are diagnostically warranted. To provide this guidance, FDA is developing recommendations for X-rays—when they are and when they are not needed. The clinician can refer to these guidelines and make a decision based on the patient's clinical history. The National Conference on Referral Criteria for X-Ray Examinations, held in October 1978, produced a recommendation about X-ray pelvimetry during pregnancy *(Statement on Use of the X-Ray Pelvimetry Examination,* published in July 1980). Another group developed a draft statement on administratively required chest X-rays. FDA also sponsors clinical research to develop data about the usefulness of certain X-ray examinations. The agency now supports five grants at universities and teaching hospitals to achieve this goal.

Recommendation about X-Rays of Pregnant Women. The developing embryo and fetus are highly sensitive to radiation damage, especially during early gestation, when the pregnancy is not obvious. As a preventive measure, FDA has proposed a recommendation advising physicians of the importance of ascertaining whether a woman is pregnant before X-raying her lower back or abdomen. Physicians will be advised to consult with the radiologist about available options: canceling the examination, limiting the examination, requesting the full examination if warranted, or deferring the examination. When an X-ray examination is being considered, women who may be pregnant are advised to inform medical personnel of this possibility.

Dental and Mammography Quality Assurance Programs. Two innovative FDA-designed programs now in operation in most states are intended to reduce unnecessary patient exposure from dental and breast X-rays. State and local radiation control agencies mail special cards containing miniature radiation measurement devices to facilities that perform dental radiography or mammography. The cards are exposed as a patient would be, and are returned to the agency, where they are "read" to determine radiation exposure. Those facilities with inappropriate exposure levels are scheduled for consultative visits, during which corrective measures are suggested. The Dental Exposure Normalization Technique (DENT) program, begun in 1972, has demonstrated a 40 percent reduction in average patient exposure, and comparable results have been achieved in the Breast Exposure Nationwide Trends (BENT) program, initiated in 1976.

Sunlamp and Tanning Booth Safety. An estimated 800,000 to 1 million sunlamps are sold in this country each year. Overexposure to these lamps can cause immediate harmful effects, such as skin and eye burns, and long-term effects, such as increased risk of skin cancer and accelerated aging of the skin. To prevent this damage to health, FDA issued a performance standard for sunlamps and suntanning booths, effective May 1980, requiring timing devices, protective goggles, protection against short-wavelength ultraviolet radiation, warning labels, and instructions for use. To protect consumers from possible harmful results of using commercial tanning booths, a special effort directed both to manufacturers and to consumers was initiated in 1980.

Laser Light Show Safety. The increasing use of laser devices in indoor and outdoor displays and rock concerts exposes audiences to two types of hazard: impaired vision and dangerous radiation levels. The FDA and State and local authorities are acting to prevent the operation of laser light shows that could expose audiences to hazardous levels of radiation. FDA is informing light show operators of their responsibilities with respect to safety, and is educating sponsors of laser light shows to employ only those whose laser procedures have been approved by the FDA.

Bureau of Veterinary Medicine

The Bureau of Veterinary Medicine develops, conducts, and evaluates programs to ensure the safety and effectiveness of preparations and devices proposed for use in animals. The Bureau

evaluates FDA's surveillance programs relating to veterinary drugs and other veterinary medical matters. Eighty percent of the meat-producing animals in the United States are raised on medicated feeds. FDA's Bureau of Veterinary Medicine is responsible for ensuring that feeds are safe and effective, that farmers understand how to use them, and that foods from animals are free from drug contamination.

National Center for Toxicological Research (NCTR)

The National Center for Toxicological Research is an FDA/EPA facility that conducts a research program to improve the power of science to predict the toxic effects of chemicals and thereby prevent their adverse effects on humans. The chemicals may appear in the air, in water, in foods, or in drugs. Under this program more reliable tests are developed for predicting genetic damage, neurotoxicity, carcinogenicity, reproductive and fetal toxicity, immunotoxicity, and cellular toxicity. NCTR aims to develop improved methods of extrapolating toxicity data from animals to humans so that the regulatory agencies can better assess human risk. The Center performs comprehensive toxicological evaluations for selected chemicals of particular interest to FDA, EPA, and the National Toxicology Program.

Health Resources Administration (HRA)

The several missions of the Health Resources Administration include: to identify health care resource needs through a careful assessment of the health care system; to recommend changes to improve access to health care, improve continuity of health care, assure equal access to health education, and enhance the Federal, State, local, and private partnership; and, through program action, to improve both the health care system and invidividual health status. HRA focuses on prevention and health promotion issues in a number of specific areas, including preparation and training of health professionals; preventive services in regional health planning and resource development; and disease prevention and health promotion activities and health status outcomes, as defined by the National Health Planning Goals.

Bureau of Health Planning (BHP)

The Bureau of Health Planning, through a network of 205 local health planning agencies known as Health Systems Agencies (HSAs) and 57 State Health Planning and Development Agencies, is responsible for regional health planning and resource development. These local and State agencies develop and implement plans for the provision of services, manpower, and facilities to meet identified needs, and identify and help to reduce inefficient or redundant health care services. Over 95 percent of the HSAs address preventive health services in their plans. Their goals cover a variety of areas including health promotion and education activities, occupational and environmental programs, and efforts aimed at identifying and correcting preventable diseases and conditions.

BHP Prevention Highlights

Health Promotion Activities. Working through the Health Systems Agencies, BHP has promoted both general community health and occupational safety and health awareness through a variety of programs. Following are some examples of activities by HSAs:

- A new health support center recently opened in South Bend, Indiana, as a result of an HSA-sponsored conference on health support and a $195,000 Blue Cross grant.
- The Eastern Washington HSA stimulated the development of an innovative program that provides personalized health education services through Walla Walla Community College. The

new health education center opened in October 1978 in response to a Health Systems Plan priority goal to teach consumers to take responsibility for their own health care.

- Working with Motorola Corporation and General Electric, the Phoenix, Arizona, HSA helped these companies to identify high-risk jobs in their plants and designed special health education programs for employees in these jobs.
- The HSA in Milwaukee, Wisconsin, identified an acute need in that highly industrialized area for nurses trained in occupational safety and health skills, and worked with the University of Wisconsin to design a training program in occupational safety and health now offered by the University.
- The Madison, Wisconsin, HSA has sponsored annual health promotion workshops for employers and labor; helped businesses and industries initiate health promotion projects; stimulated the development of resources to assist the projects; and published a guide to developing health promotion programs. As a result of these activities, three large hospitals and two county governments initiated programs for their employees.

Disease Prevention Activities. HSAs are working to increase immunization levels and to carry out a variety of other disease prevention efforts, including the following examples:

- Through a major initiative by the Maumee, Ohio, HSA to increase immunization levels for children, every county in the region reached at least a 95 percent compliance with child immunization standards.
- For the second consecutive year, the Central Indiana HSA joined Blue Cross and Blue Shield in sponsoring the Central Indiana Health Fair. Held in downtown Indianapolis, the fair drew over 35,000 participants. There were nearly 100 exhibitors distributing information and providing free health tests for diabetes, cancer, sickle cell anemia, high blood pressure, vision, and hearing.
- In Michigan, the Grand Rapids HSA took the lead in its community to initiate a dental disease prevention program directed at children. Joining with the local dental society, the HSA sponsored a school dental health education program for kindergarten through the sixth grade. Area dentists estimate that to date the program has saved $250,000 in dental treatment costs among these children.

Bureau of Health Professionals (BHPr)

The Bureau of Health Professions provides national leadership in coordinating, evaluating, and supporting the development and utilization of United States health personnel. It assesses the supply and requirements of the Nation's health professions and develops and administers programs to meet those requirements; collects and analyzes data and disseminates information on the characteristics and capacities of health professions production systems; and develops, tests, and demonstrates new and improved approaches to the development and utilization of health personnel within various patterns of health care delivery and financing systems. The Bureau provides financial support to institutions and individuals for health education programs, administers Federal programs for targeted health personnel development and utilization, and provides technical assistance to National, State, and local agencies, organizations, and institutions for the development, production, utilization, and evaluation of health personnel. The Bureau carries out a variety of program activities to ensure adequate and appropriately trained health personnel that will contribute to the development of disease prevention and health promotion services.

BHPr Prevention Highlights

Curriculum Models in Occupational, Industrial, and Environmental Medicine. Most medical school curricula are deficient in the areas of occupational, industrial, and environmental medicine. BHPr has contracted for FY 1979 and FY 1980 with the University of Arizona Center of Occupational Safety and Health to implement and evaluate curriculum models to correct this deficiency in five medical schools. The immediate and long-term effects of the models on the students will be measured, and the curricula will be disseminated to other teaching institutions. Contract modifications in FY 1981 will support the development of a learning module on alcohol and drug abuse as a part of an interagency agreement with the National Institute on Alcoholism and Alcohol Abuse. A national conference will facilitate dissemination of the materials being developed.

School Nurse Practitioner Grant. The University of Colorado School of Nursing, through a grant renewed in 1980 to prepare school nurse practitioners, has developed a series of teaching aids for the education of children. These include comic books for young children and the development of a personal health history that emphasizes participatory health consumer roles in nutrition, immunizations, and exercise.

Nutrition Curriculum Development. Thirteen grants for $1.5 million were awarded in FY 1979 and continued in the following year to professionals in nutritional assessment and counseling. All the grants include medical students or residents as well as other health professionals in training and have as their purpose the development or expansion of courses to improve student skills in using nutrition concepts integral to their patient care activities. Several interdisciplinary training courses, clinical and didactic in format, were developed during the first year. Some of the projects have developed self-instructional modules on specific topics in nutrition. Computer-assigned instruction modules, videotapes, patient education materials, and computerized clinical assessment materials have also been developed.

Environmental Health Curriculum Development. Protecting consumers from exposure to harmful environmental factors is the ultimate goal of 15 curriculum development grants totaling nearly $1 million. Instructional materials are being developed to educate medical students about environmental diseases—their cause, diagnosis, treatment, prevention, and identification of potential exposures.

Curriculum Models in Preventive Dentistry. Five dental schools were awarded contracts to develop and implement curricula to train dental students to plan, organize, and arrange the delivery of community preventive services. A total of 804 students were trained, and a full range of communities and target populations were provided with preventive dentistry services. It is anticipated that this program will enhance the awareness of future dentistry practitioners of the need for preventive dentistry in their communities.

Traineeship Grants and Special Projects. Both Public Health Service Traineeship Grants and the Special Projects Program reflect the effort to expand disease prevention and health promotion curriculum initiatives to include epidemiology, environmental and occupational health, and dietetics or nutrition. Though precise measures of the shortages of public health personnel are not available because methodological difficulties, the 1979 report on public and community health personnel, prepared at the request of Congress, estimates that 150,000 people are wholly engaged in public health work. Existing studies and prevailing expert judgment indicate chronic shortages of certain types of specialist, including epidemiologists and biostatisticians. In FY 1979 there were 73 special project grant awards, and 64 the following year, to expand or develop programs in these areas. Twenty-one new traineeship grants and 14 continuation grants were made in FY 1979 to accredited schools of public health and other education institutions; in FY 1980, 27 new traineeship grants and one continuation grant were awarded.

Health Services Administration (HSA)

The programs administered by the Health Services Administration are designed to provide comprehensive primary health care services. HSA accomplishes this goal by encouraging health professionals to establish their practices in medically underserved communities, by correcting inadequacies in the national distribution of health services, by improving the quality of health care while fostering more efficient methods of delivering it, and by directly providing hospital and clinical care to certain legally defined groups of citizens.

HSA's community programs bring health care to previously neglected areas by identifying local health care needs and by opening neighborhood and family health centers that involve the residents in actual work at the centers. Comprehensive primary health care centers now serve the needs of 4.5 million people, and the Indian Health Service provides health care to 700,000 American Indians and Alaskan Natives.

Bureau of Community Health Services (BCHS)

The primary goal of the Bureau of Community Health Services is to assure the availability and delivery of high-quality health services to American Communities. Special attention is directed to the establishment and organization of primary health care services in areas where they are nonexistant or insufficient. Special programs are conducted for migrant workers, mothers and children, children with crippling conditions, families unable to afford necessary comprehensive family planning services, victims of black lung disease, persons with hypertension, and Appalachian residents. The BCHS National Health Service Corps recruits health care professionals to serve in areas that have shortages of such professionals. Corps personnel not only improve services in the communities, but also help each area to develop its own continuing system of health care.

BCHS Prevention Highlights

Productivity/Effectiveness Initiative. During Fiscal Year 1979, the BCHS developed an initiative to increase productivity and effectiveness in ambulatory care projects. The aim of this project is to measure effective and efficient performance against published criteria as a condition for awarding continuation grants and providing technical assistance. Some of the specific indicators related to prevention include immunizations, prenatal care, family planning counseling for adolescents, Pap smear follow-up, hypertension screening, and anemia screening.

Accident Prevention and Injury Control in Children. To decrease preventable disability and death from injuries and/or accidents, BCHS and the Bureau of Medical Services are developing Preventive and Emergency Child Health Care Systems. Three demonstration projects carried out under the auspices of State maternal and child health programs in different parts of the country are improving the collection and analysis of demographic, epidemiologic, and operational systems data related to accidents involving children. The data are used to identify those children who are most likely to suffer accidents and to develop specific approaches to controlling injuries to such children. The projects involve the coordinated efforts of a broad spectrum of State and local public agencies, neighborhood and voluntary organizations, professional associations, and the private sector.

Family Planning Information. The National Clearinghouse for Family Planning Information began its fifth year of operation in August 1980. This service provides information to consumers and potential consumers about the benefits of family planning services. The Clearinghouse has distributed over 7.4 million publications to the 6,000 BCHS-supported clinics and in response to public inquiries. Six health education and information services bulletins are issued annually, and a 1979-80 catalog of approximately 1,000 Federally and privately produced print and audiovisual materials is being distributed.

Family Planning Media Projects. Two media projects were run in 1980 by the Office of Family Planning, BCHS, to motivate adolescents to think and act responsibly about sex: one on the dangers and difficulties of teenage pregnancy, and six weeks later, a second, a series of messages about peer pressure and sexual responsibility. Four television PSAs will be produced in 1981 to promote communication between parents and their children about human growth and development, reproduction, and responsible decision-making. Data will be collected on station use, estimated audience, and the number of write-ins received by the National Clearinghouse for Family Planning Information.

Maternal and Child Health and Crippled Children's Services Research Grants Program. The Maternal and Child Health and Crippled Children's Research Grants Program currently funds about 50 active research grants. During 1980, the program continued to focus on research in the delivery of health care to mothers and children; adolescents; nutrition; the study of manpower for care of mothers and children; and the dissemination of research findings. In March 1980, the University of Colorado Health Sciences Center School of Nursing, a grantee under this program, published a report entitled *Parental Preparation of Preschoolers for Hearing and Vision Screening*. The report emphasizes the importance of screening as a prevention technique and evaluates proposed solutions to the problems most frequently encountered in attempting to screen preschoolers for hearing and vision problems.

Primary Care Research and Demonstration Projects. The Office of Rural Health has sponsored a series of projects emphasizing health education and the development of self-care skills to reduce risks and promote prevention activities among individuals ranging in age from children to the elderly. One such project is designed to support health promotion and disease prevention for the health underserved in rural Alabama and to design and implement education programs that emphasize the importance of identifying, coordinating and integrating existing primary health

service programs. The intervention program consists of a medical model focusing on reduction of uncontrolled hypertension and an educational model focusing on individual health care practices.

Health Promotion Assessment Guide. As a companion to *Promoting Health/Preventing Disease: Objectives for the Nation,* BCHS developed a guide to help personnel at primary care centers evaluate their health promotion programs and initiate new activities in light of the objectives. As part of their commitment to improving the health of the community, ambulatory care centers are in a unique position to assess, plan, and implement local activities encourage healthy behaviors. The guide provides ideas about new approaches to health promotion as well as references to national and local resources.

Hypertension Services. BCHS provides grants to States for hypertension detection screening, referral for treatment and follow-up for persons with high blood pressure. The program expanded in 1980 to increase the number of people served and to establish better follow-up systems. BCHS and the National Heart, Lung, and Blood Institute are planning to undertake five demonstration projects for Black and Hispanic populations based on the recommendations of the Black Health Providers Task Force and the findings of the Hypertension Detection and Follow-up Program.

Bureau of Medical Services (BMS)

BMS provides medical care for merchant seamen, members of the uniformed services, and selected community groups. The Bureau includes among its goals the identification of populations at high risk to permit efficient planning of preventive health care delivery. It operates a system of eight Public Health Service (PHS) hospitals and 26 clinics, located primarily in port cities. BMS administers the medical programs of the U.S. Coast Guard and the Federal Bureau of Prisons and provides occupational health care and safety services to all Federal employees. It has the responsibility for improving the Nation's emergency medical services through technical assistance and financial support. BMS conducts clinical and basic research and offers training for health professionals.

BMS Prevention Highlights

Employee Health Hazards. The BMS provides continued assistance to Federal agencies in identifying environmental problems that cause employee illnesses. In FY 80, the Division of Federal Employees Occupational Health (DFEOH) of BMS conducted studies of such employee complaints as liver dysfunction, cardiovascular problems, respiratory illness, dermatitis, loss of hearing, and workplace allergies. New studies involve the Environmental Protection Agency in Washington, D.C., where employees complained of illness caused by an unknown element that may have resulted from a camera processor. Currently BMS is investigating the high degree of cardiovascular disease among employees of the National Oceanic and Atmospheric Administration. The DFEOH provides the services of a professional industrial hygienist who serves as a consultant to project officers and as principal investigator for various Federal agencies in conducting epidemiological studies involving workplace exposure.

Center for Occupational and Environmental Health. The creation in 1979 of a comprehensive occupational health service is the result of a cooperative effort between the Baltimore PHS Hospital and the Johns Hopkins University School of Hygiene and Public Health. The program has three units—one to investigate environmental hazards, a second for positive identification of toxic agents, and a third to treat patients. The service aids community-based Federal agencies, private industry, and the National Maritime Union (AFL-CIO). An interagency agreement between the USPHS Hospital in Baltimore and NIOSH will support development of the Center in FY 1980, 1981, and 1981.

Division of Hospitals and Clinics. Disease prevention measures are applied in a variety of ways at individual hospitals in the Division of Hospitals and Clinics. Included are activities such as the following:

- A new grant from the Council on Aging helps to provide special luncheon programs in Boston featuring speakers who talk about personal health management subjects to the elderly in the community.
- At the Norfolk USPHS Hospital, an agreement is being developed with the Department of Housing and Urban Development to fund and revitalize a now!defunct immunization program for innercity residents.
- A novel patient education activity at Nassau Bay Public Health Hospital utilizes closed circuit television in patient waiting rooms, where various health education programs are telecast for 10- to 15-minute periods throughout the day.

- The Baltimore Public Health Hospital is collaborating in a smoking cessation project funded through Johns Hopkins Hospital.

Indian Health Service (IHS)

The Indian Health Service aims to elevate the health of Native Americans to the highest possible level and to provide these citizens with opportunities for defining and meeting their own health needs. The IHS operates a comprehensive health services system that provides health care for over 750,000 American Indians and Alaskans through a network of 51 hospitals, 86 large health centers, and more than 300 field clinics. The IHS emphasizes prevention through research, dissemination of information, and delivery of preventive services.

IHS Prevention Highlights

Office of Alcoholism Programs. Alcoholism is a prominent health problem for American Indians. As a result, Title II of the Indian Health Care Improvement Act requires the IHS to assume responsibility from the National Institute on Alcoholism and Alcohol Abuse for support of American Indian and Alaska Native alcoholism programs. The Office of Alcoholism Programs is the responsible unit. For FY 1980 and FY 1981, 135 programs totaling $15.2 million have been transferred to IHS. Of the 275 recognized tribes eligible for health care services, it is estimated that 144 are receiving alcoholism services. Approximately $935,000 was allocated by NIAAA in FY 1980 for the funding of 33 new Indian alcoholism programs directed toward women and youth.

Immunization Initiative. In accordance with the overall Departmental immunization initiative, the IHS objective for immunization is to fully immunize 90 percent of Indian children under 27 months of age against diphtheria, tetanus, pertussis, polio, measles, mumps, and rubella. At the beginning of the IHS immunization initiative, the immunization level (total number appropriate for age) was 60.8 percent. By June 30, 1980, the immunization level (total number appropriate for age) was 87.2 percent.

Nutrition. At least 50 percent of the American Indian and Alaska Native patients in maternal and child health clinics present symptoms of malnutrition, particularly anemia, low zinc and vitamin A levels, obesity, and underweight. In the population as a whole, diabetes and obesity rank as the outstanding nutrition problems. Alcoholism is a major health problem concomitant with malnutrition. Ten percent of the Indian population are elderly and are facing the problems of limited income and restricted mobility, which affect their nutritional status. Efforts to address those problems include the following: two projects on the Navajo Reservation providing the necessary research baseline for low levels of zinc and vitamin A among prenatals, lactating mothers, and preschoolers; funding of 28 State Indian agencies through the Women, Infant, and Children's program (WIC) to provide services to over 15,000 participants; development of maternal and child health modules at the Nutrition and Dietetics Training Center for use by tribal personnel employed in nutrition programs.

National Institutes of Health (NIH)

The National Institutes of Health (NIH) administer a comprehensive research program to improve the health of the American Public through acquisition of new knowledge of disease. A federation of organizations containing 11 Institutes of Health, each with its own medical focus, NIH includes other entities within its structure: the National Library of Medicine, the Clinical Center (a hospital research unit), the Fogarty International Center, and several administrative support divisions.

National Institute on Aging (NIA)

Aging is associated with the onset of numerous pathological states. Moreover, economic, social, and psychological factors generate circumstances that can exclude older persons from productive and satisfying lives. In addition to conducting fundamental studies of the aging process, NIA has the responsibility for biomedical, social and behavioral research and training related to the special problems associated with aging.

NIA Prevention Highlights

Conference on the Risks and Benefits of Estrogen Therapy. Estrogen therapy has proved useful against menopause symptoms and possibly osteoporosis (a form of bone disease), but it is also associated with an increased risk of uterine cancer. A consensus development conference NIA held in September 1979 attempted to compare the benefits of estrogen therapy with the risks. A summary document of the conference is available from NIA. Data collected subsequently by NIA reveal that estrogen use has declined sharply.

Study of Exercise and the Aging Process. In 1979 NIA established a program on exercise physiology that will examine aging-related changes of the musculoskeletal system and determine whether exercise can be used to maintain health by regulating these changes. An objective of this program is to provide new information about and understanding of the role that exercise or the lack of it may have on the health and quality of life of the elderly. One project carried out at the University of Wisconsin has demonstrated the effectiveness of exercise in stimulating bone accretion of humans above the age of 55 and thereby countering the effects of osteoporosis. Ongoing studies are directed at women aged 40 to 65 years, an age range during which the most critical bone loss occurs.

Study of Human Adaption to Life-Cycle Changes. How human begins adapt to life-cycle changes in later life is the subject of the Duke Adaptation Study. Begun in 1968 as the second of two longitudinal studies, it focused on 502 participants (aged 45 to 69 when the study was initiated) to find the answer. The study concluded that participants who had reduced psychological resources (low intelligence, high anxiety) were most likely to experience stress from events such as illness, widowhood, retirement, or a last child leaving home. Among the majority of participants, most of these stresses had little significance, indicating that life-cycle stresses have less influence on older individuals than previously thought.

National Institute of Allergy and Infectious Diseases (NIAID)

The National Institute of Allergy and Infectious Diseases conducts and supports research contributing to a better understandingof the causes of allergic, immunologic, and infectious diseases and to the development of better means of preventing, diagnosing and treating illness. The Institute conducts studies of the diagnosis, treatment and prevention of all types of infection, including research on antibiotics, antimicrobial and antifungal therapy, antiviral substances, antisera, and vaccines.

NIAID Prevention Highlights

Conference To Develop a Consensus on the Use of Amantadine for the Prevention and Treatment of Influenza A. Epidemic Influenza A is clearly associated with excess mortality among the elderly, ly, and costs of a pandemic year may total $5 or $6 billion. Costs in interpandemic years are measured in the hundreds of millions. In October 1979, NIAID sponsored a consensus development conference of amantadine, an antriviral agent that shows indications of usefulness in the prevention and treatment of Influenza A. The conference brought together scientists, health practitioners, and consumers to review current knowledge in these areas. Their final recommendations are available in an NIAID report entitled *Consensus Development Conference Summary II: Amantadine: Does It Have a Role in the Prevention and Treatment of Influenza A?*

Gonococcus Vaccine Development Contract. Gonorrhea constitutes a major public health problem in the United States. In 1977 there were an estimated 2.5 million cases. In 1979, NIAID contracted for the development of a gonococcus vaccine that, if successful, could prevent gonorrhea and related complications, such as pelvic inflammatory disease, sterility, and fetal and infant deaths. New purification procedures for the isolation of principal outer membrane protein (POMP) of the gonococcal cell were developed; these resulted in POMP of greater antigenicity and in 40-fold higher yields.

Hepatitis B Vaccine Trials. Hepatitis B is a viral disease that is spread through blood transfusions, sexual contact, and transmission from mother to unborn child. There are 200,000 chronic carriers of Hepatitis B in the world, including an estimated 0.1 percent of the population of the United States. In 1979, NIAID supported a study of the efficacy of a Hepatitis B vaccine in two high-risk populations: a group of volunteer subjects undergoing renal dialysis and the staffs of dialysis units in New York City. Another study is testing the efficacy of Hepatitis B immune gobulin in preventing transmission of the virus from mother to fetus.

National Institute of Arthritis, Metabolism, and Digestive Diseases (NIAMDD)

The National Institute of Arthritis, Metabolism, and Digestive Diseases is responsible for a wide variety of research on disease related to arthritis, the musculoskeletal structure, the bone and skin, the endocrine system, the digestive tract, and the orogenital tract. The Institute is concerned with diseases for which the causes are unknown or poorly defined, and in these areas concentrates its prevention efforts in basic research studies on causation and pathophysiology. The following nutrition areas are emphasized: obesity, supportive nutrition, dietary fiber, metabolism and mechanism of action of nutrients, interactions and factors that modify nutritional requirements, and trace element nutrition.

NIAMDD Prevention Highlights

Recommended Dietary Allowances. The establishment of standards for nutrient needs is a difficult procedure, but one that has direct importance in the maintenance of optimal health. The Recommended Dietary Allowances (RDA) established by the Food and Nutrition Board of the National Research Council serve as national standards. The Board, with the support of NIAMDD funds, draws upon experts from a variety of sections who serve on its Committee on Dietary Allowances for all nutrients known to be essential for optimal human health. Adherence to this set of recommended daily dietary intake guidelines provides the amount of nutrients and calories adequate to nourish most healthy individuals in the United States. The most recent revision was released in 1980.

Nutrition Program. Recognizing that the essential nature of an ever-increasing number of trace elements is of considerable concern, NIAMDD research has emphasized the metabolic role of such trace elements as zinc, iron, chromium, silicone, and fluorine to determine their essentiality to health. An important finding in this area concerns the role of the amino acid tyrosine in lowering blood pressure in rates. Other studies have established that the mineral zinc prevents growth retardation in young children and improves sperm formation in men, the element silicone improves collagen formation in blood vessels, and the element chromium makes a significant contribution to lowering blood sugar levels. Researchers have also developed a substance that can be taken orally and could be instrumental in preventing various urea-cycle-deficiency diseases.

National Cancer Institute (NCI)

The National Cancer Institute is the central coordinating agency for the national research effort against cancer. It funds and conducts scientific research and the training of scientists and makes cancer information available to scientists and to the general public. The NCI prevention initiative has three principal objectives: developing substances that interfere with the process of cancer formation, identifying cancer-causing substances and behavior, and educating the public to minimize their exposure to such substances.

NCI Prevention Highlights

Use of Retinoids in Cancer Prevention. Studies indicate that retinoids, the set of molecules comprised of Vitamin A and its synthetic analogues, may prevent the development of some forms of cancer. One drawback to the widespread use of retinoids has always been their toxic side effects. However, NCI has made progress recently in the development of new agents that are less toxic and can be more accurately directed at specific organ sites, such as the lung, bladder, or breast, where preventive action is desired. Their increased potency results from alteration of the pattern of tissue distribution of the retinoid molecule. Current activities include development of a project to assess the use of topical retinoids in prevention of cervical cancer.

New Research on Carcinogens Working in Tandem. The development of cancer can be potentiated by exposure to several environmental agents, either at the same or at different times. Examples include: asbestos and smoking for lung cancer; smoking and drinking for cancer of the oral cavity, pharynx, larynx, and esophagus; and the copper smelting chemicals sulfur dioxide and inorganic arsenic for lung cancer. An important laboratory finding in this area is that pretreatment of cells by X-irradiation, or by an alkylating agent such as methylmethane sulfonate (MMS), results in an increased number of cell transformations if the cells are subsequently treated by any of a variety of carcinogens. Under the experimental conditions used, the X-ray pretreatment alone produced no transformation, and the MMS alone produced only rare transformations. Another significant finding of this study was that the enhancement of transformation by X-rays or alkylating agents is independent of whether the chemical carcinogen subsequently used is a polycyclic hydrocarbon, another alkylating agent, or a compound that produces effects similar to those of ultraviolet irradiation.

Research on Biological Response Modifiers. Currently there is high interest in biological response modifiers—a group of substances that can alter the development and progression of cancer. Perhaps the best known is interferon. In FY 1980 the Division of Cancer Treatment funded a project in Tanzania, to assess the effects of chemoprevention on the formation of skin cancer in albinos. The incidence of cancer will be correlated at monthly intevals with exposure to the sun. In addition, compounds that have been approved for human use will be tested on the patient population to determine their effectiveness in reducing the incidence of skin cancer. The knowledge gathered here will have implications for the prevention of skin cancer in other people with little or no pigment, such as North Americans and Europeans, in whom skin cancer is by far the most frequent cancer.

Dietary Role in Cancer. Accumulated evidence suggests that diet may play a role in the causation of certain forms of cancer. Data from epidemiologic and animal studies suggest roles for fat and fiber in the causation of cancer, but those roles have yet to be defined; and it is not now certain how changes in the intake of fat and fiber might contribute to prevention of cancer. Other dietary factors under investigation for their influence in enhancing or inhibiting carcinogenesis include: total caloric balance; vitamins (especially A, C, and E); minerals (especially selenium and zinc); and naturally occurring compounds (such as pesticides, preservatives, flavoring and coloring agents, and packaging materials). While there is no present indication that these classes of compound cause cancer, the NCI is assessing these and many other chemicals found in the environment to ascertain their potential for doing so.

Consensus on Pap Smears. A Consensus Development Conference on "Cervical Cancer Screening: the Pap Smear" was held at the National Institutes of Health in July 1980. The purpose of the conference was to examine the scientific basis for screening for cervical cancer and to make recommendations to the medical community and the public on the use of the Pap smear in screening for cancer of the uterine cervix. No attempt was made to provide recommendations about Pap smear screening for other cancers of the female genital tract (i.e., endometrial, ovarian, hormonal). Recommendations were based on screening procedures as applied to healthy female populations and not to women identified as patients undergoing gynecologic treatment. In addition, some of the critical unanswered questions were identified. Details of the recommendations may be obtained from the National Cancer Institute.

National Institute of Child Health and Human Development (NICHD)

The National Institute of Child Health and Human Development conducts and supports research on the reproductive, developmental, and behavioral processes that determine the health of children, adults, families and populations. The NICHD is committed to the principle that the earliest phases of life offer exceptional opportunities to prevent disease and disability that can affect people at any time in their lives; and the Institute emphasizes primary prevention, whenever possible, to intervene before biological and behavioral problems emerge.

NICHD Prevention Highlights

New Program on Behavioral and Cultural Aspects of Nutrition. In FY 1980 the NICHD spent more than $2 million on a program of research on behavioral and cultural influences on nutrition, to determine the effects of diet and other nutritional influences in childhood on later development of disorders such as obesity, diabetes, hypertension, and heart disease. The results are expected to have important implications for these disorders and for anticipating problems caused by allergic or idiosyncratic reactions to certain foods, such as milk, sugars, wheat, soybeans, fava beans, and various food additives. Emphasis in the program is given to behavioral, sociocultural, and genetic influences on dietary patterns, taste preferences, and food aversions.

Study of the Relationship Between Oral Contraceptives and Heart Attacks. An NICHD study initiated in the mid-1970s has discerned an increased incidence of myocardial infarction among women of childbearing age who take contraceptives and who do not have diabetes mellitus, high blood pressure, or other diseases that would predispose them to heart attacks. The data most cited suggest that the overall risk for a first myocardial infarction in premenopausal women who used oral contraceptives in the preceding month is four times that for women who do not use oral contractptives. Women who smoke more than 25 cigarettes a day and who used the pill in the preceding month were also noted to have 39 times greater risk of myocardial infarction than women who neither smoke nor use the pill. However, the data do not show significant numbers of fatalities, and no increase was found among women taking oral contraceptives who were already predisposed to heart attacks.

Study of the Relationship Between Oral Contraceptives and High Blood Pressure. Using oral contraceptives did not increase the incidence of high blood pressure among women who participated in an NICHD study begun in the mid-1970s. The study revealed no differences in family history, in clinical and laboratory characteristics, or in the spontaneous or therapeutic reversibility of high blood pressure between users and nonusers of oral contraceptives.

Study of the Hormonal Effects of Vasectomy. Vasectomies had no significant effect on hormone levels in 200 males who participated in a recently completed NICHD study. In the study, blood levels of testicular and pituitary hormones were checked before surgery and then monitored for two to three years afterwards. Patient hormone levels did not change significantly during this time.

Conference To Develop a Consensus on Techniques for Prebirth Diagnosis. The NICHD sponsored a conference on the safety and efficacy of techniques used in prebirth (antenatal) diagnosis. The conference brought together physicians, biomedical researchers, consumers, and others to review the techniques used in predicting hereditary disease, fetal age, and fetal distress. These techniques included amniocentesis, pulse-echo sonography, fetoscopy/placental aspiration, creatinine concentration in amniotic fluid, phospholipids (pulmonary maturation), and electronic fetal monitoring and fetal scalp blood pH determination. Ten thousand copies of the full report of the NICHD, *Consensus Development Conference Summary on Antenatal Diagnosis,* were distributed to a wide range of health professionals, and conference recommendations were also disseminated through journal articles.

National Institute of Environmental Health Sciences (NIEHS)

The National Institute of Environmental Health Sciences supports and conducts research on the effects of environmental agents on human health, seeking identification of chemical, physical, or biological agents or disease before they are released into the environment. Through this research, and through manpower training and information services, NIEHS assists the many public and private organizations that are also concerned with links between environmental factors and disease, and provides the scientific information base needed by regulatory agencies concerned with controlling environmental hazards.

NIEHS Prevention Highlights

National Toxicology Program. The National Toxicology Program (NTP) was established in FY 1979 as a cooperative endeavor among four DHHS agencies (NIEHS, NCI, FDA, and CDC/NIOSH) to develop scientific information to protect the health of the American public from damage by exposure to environmental chemicals. During FY 1980, the NTP continued research and management activities in support of the four specific goals of the program: (1) to broaden toxicological characterizations of chemicals that are tested; (2) to increase the rate of chemical testing; (3) to develop and validate a series of protocols appropriate to regulatory needs; and (4) to improve and expand generation and dissemination of information concerning test results, method development and validation, and other program activities. As part of its commitment to NTP, during FY 1980 NIEHS tested approximately 300 chemicals for genetic toxicology in Salmonella. All chemicals selected for NTP's lifetime carcinogenesis bioassays and for testing in its general toxicology screen are tested first in this system. The Salmonella test system is also being used in an interlaboratory study to determine the correlation between carcinogenicity—as measured by the lifetime bioassy—and mutagenicity.

Study of Agent Orange and Its Contaminant Dioxin. As concern has mounted among several thousand Vietnam veterans who feared health effects from possible exposure to Agent Orange (one of the herbicides widely used as a defoliant in Vietnam in the late 1960s), the President, the Congress, and the Executive Branch have sought solutions. To this end, during FY 1979, DHHS started a program to focus biomedical, clinical, and epidemiologic studies on the specific damage caused by Agent Orange and other herbicides containing dioxins. This program is directed by the DHHS Committee to Coordinate Environmental and Related Programs (CCERP), chaired by the NIEHS Director. A male animal reproductivity study was initiated in FY 1980. Recently, NIEHS/NTP reported that it found no evidence of germ cell toxicity or adverse effects in the development and survival of offspring as a consequence of paternal exposure to simulated mixtures of Agent Orange. These results were forwarded to the President's Interagency Work Group to Study the Possible Long-Term Health Effects of Phenoxy Herbicides and Contaminants.

Study of Contaminants in Mothers' Milk. NIEHS has begun a study to determine how much and what kind of environmental contamination infants are receiving from breast feeding. Previous studies have already found that breast milk can be

contaminated by chemicals. One such study determined that most mothers in the Southeastern United States carry detectable amounts of the pesticide DDT and that more than two thirds of the milk samples contained at least trace amounts of the family of insulating chemicals called PCBs (polychlorinated biphenyls). NIEHS hopes that the new study, which involves patient volunteers at hospitals in North Carolina and which will compare breast-fed infants with those fed on commercial formulas, will reveal whether or not there are chemicals in the foods these babies receive and, if there are, what effects the chemicals have on the children's long-term health and development.

New Investigator and Mid-Career Training Programs. As a new science, environmental health is not well established within the institutions that train the Nation's clinical and biomedical investigators. NIEHS has developed two programs designed to close these training gaps. The first program, entitled the New Investigator Research Award, is designed to attract young investigators. The second training effort, called the Mid-Career Development Award Program, is designed to reach biochemists, pharmacologists, physiologists, and other scientists and to provide them with career development opportunities in environmental toxicology. In FY 1980, New Investigator Awards have been made to 44 recipients. Training is being carried out at universities throughout the country, including the University of Maryland, Yale, SUNY, Oregon State, Cornell, Texas, Oklahoma, Washington, Washington State, Michigan State, Stanford, Emory, and UCLA.

National Eye Institute (NEI)

The goal of NEI is to work toward the elimination of the major causes of blindness and visual disability. The Institute supports research on the functioning of the visual system, the pathology of visual disorders, and the sciences supporting vision research. It also sponsors research on the prevention and treatment of visual disorders, fosters studies of the rehabilitation of the visually handicapped, and encourages clinical application of research findings. Moreover, NEI aims to heighten public awareness of vision problems through information programs and cooperates in health campaigns and other projects sponsored by volunteer organizations with similar concerns.

NEI Prevention Highlights

New Consensus Opinion on Lens Implants in the Eye. A recent NEI conference on lens implants in the eye concluded that these operations should be restricted to elderly cataract patients and to one eye only unless specific needs dictate otherwise. The consensus development panel in Intraocular Lens Implantation (IOLS) added that lens implantation "may be used for younger patients only if contact lenses or eyeglasses are not likely to boost the wearer's function." Currently, one quarter of the estimated 400,000 cataract operations performed annually in the United States involve implantation of intraocular lenses. The summary of the consensus was recently published.

Prevention and/or Control of Eye Diseases Related to Nutritional Deficiencies. Improper nutrition may have various debilitative effects on the eye. The lack of essential substances such as proteins, carbohydrates, fats, minerals, and vitamins may produce specific deficiency symptoms. A study currently supported by the NEI relating to cataracts is directed toward identifying nutrient risk factors in cataractogenesis. One NEI intramural project aims to determine the biochemical basis for Vitamin A-mediated changes in corneal epithelium. Another intramural project has been designed to examine the influence of rhodopsin (Vitamin A + opsin) on structural alterations induced by light. This project is testing the hypothesis that rhodopsin is involved in initiating the process leading to the structural deterioration of retinal photoreceptors. Finally, the NEI supports an intramural project to learn how ocular diseases involving Vitamin A metabolism can be prevented or treated, once they have developed. Specifically, this project is attempting to clarify the mechanism of action of retinoids in ocular tissues.

Use of Vitamin E to Prevent Retrolental Fibroplasia. With the judicious limitation of oxygen therapy in the newborn, the incidence of retrolental fibroplasia, once the leading cause of blindness in children, has been dramatically reduced. Nevertheless, because of the difficulty of precisely and continuously monitoring blood oxygen levels and because of differences in retinal vascular sensitivity to oxygen, this disease continues to cause blindness. Since there is evidence that Vitamin E affects the cellular defenses against oxidative damage, its clinical effect under conditions of carefully controlled oxygen therapy is being tested in an NEI-sponsored clinical trial of over 650 infants at three hospitals.

Investigation of the Effects of Drugs, Light, and Environmental Substances in Retinal and Lens Disorders. The effects of light, drugs, and environmental hazards upon the retina and lens

are being studied. One project is designed to clarify further the role of near ultraviolet light in ocular tissue damage, specifically, the role of sunlight as a factor in human retinal and lens pathology, and to test the efficiency of antioxidants and free radical scavengers in preventing this damage.

Prevention of Recurrent Corneal Infection from Herpes Simplex Virus. Recurrent herpes simplex keratitis is a major cause of morbidity and visual loss in humans. At the present time no reliable means of preventing recurrence of this disease exists. Between episodes, herpes virus appears to reside in some form in the nuclei of the trigeminal ganglion. Clinical initiators such as febrile illness, emotional stress, sunlight, and trauma have been associated with the recurrence of herpes keratitis. In all such instances cellular cyclic AMP is elevated, either through synthesis of prostaglandins or epinephrine release. NEI-supported research is attempting to clarify the mechanism of herpes recurrences by study of cyclic AMP stimulators and inhibitors in an animal model. A better understanding of the mechanism of recurrences will lead to clinical therapy to prevent devastating corneal disease.

Prevention of Trachoma and Related Infections. The goal of this research is the prevention of control of trachoma, the leading cause of blindness worldwide, and of other diseases caused by infection with trachoma or closely related organisms. Investigations supported by NEI are directed at improving immunoclassification of these organisms, determining their biological characteristics, and isolating and describing chemically their antigens. The role of a genital reservoir for trachoma organisms is being evaluated in areas of trachoma endemicity on Taiwan, in areas no longer endemic for trachoma in Taiwan, and in the United States.

Prevention of Proliferative Retinopathies. Diseases such as diabetes that impair retinal function by affecting the retinal vessels invariably do so by causing blood vessels to close off, leak, or grow abnormal, fragile offshoots that bleed. The NEI is supporting investigations, including clinical trials, aimed at understanding, preventing, and correcting the proliferative retinopathies and retinal vascular disease in general.

Development of Chemicals that Inhibit Production of Aldose Reductase, an Enzyme that Triggers Sugar Cataract. The discovery that aldose reductase triggers the events that lead to sugar cataract formation is the basis for the development of several inhibitors of the enzyme to delay this cataract formation process. These inhibitors have been successfully tested in laboratory animals, and most recently one new inhibitor has been shown to be completely effective in blocking cataract formation in diabetic animals. This research has implications not only for the possible prevention of human diabetic cataracts but also because aldose reductase has been implicated in the causation of other diabetic complications, for the alleviation of diabetic neuropathy and retinopathy.

Research Aimed at Prevention of Amblyopia and Myopia. It has now become possible to measure visual acuity, color vision, and eye movement control in infants less than six months of age. These analyses should enable the detection of such disorders as strabismus and amblyopia at much earlier stages and earlier initiation of appropriate treatment, thereby preventing loss of vision. NEI has awarded one grant to track longitudinally the molocular visual resolution capabilities in esotropic (crosseyed) infants before and during therapeutic management. Results so far indicate that the human visual nervous system is highly susceptible to modification by esotropia and short periods of occlusion during the first year of life. Under another NEI-supported grant, an attempt is being made to characterize the morphologic changes in the eyes of chicks as myopia develops to help prevent this disorder in humans. Another NEI grant funds research into whether an overcorrection of optical lens power for children with myopia will slow down the rate of increase in myopia.

Prevention of Glaucoma. Impressive progress has been made in recognizing the causes of and in diagnosing and treating angle-closure glaucoma; however, earlier diagnosis could substantially lower the incidence of vision loss from this disease. Developing a means of identifying people with anatomic predispositions to angle-closure glaucoma, who are at greatest risk of acute attack and loss of vision, would help achieve the goal of prevention. An attempt is being made to determine the association between lowered blood pressure and the presence of glaucomatous-like visual field defects. A significant association between blood pressure reduction and visual field defects would have serious implications for the current mode of therapy for systemic hypertension. Finally, another NEI-supported grant is controlling the physiology of aqueous humor. If this attempt is successful, the results will provide a basis for using these drugs in controlling glaucoma.

National Institute of Dental Research (NIDR)

To improve the oral health of Americans, the National Institute of Dental Research conducts, fosters, and coordinates research into the causes, prevention, diagnosis and treatment of oral disease and conditions. The Institute supports investigator-initiated research grants, research training, intramural projects, and contract research and development. In 1971, the National Caries Program was established to focus priority support on the development of preventive technologies to combat the major cause of tooth loss among children, a disease that afflicts more than 90 percent of Americans during their lifetimes.

NIDR Prevention Highlights

Demonstration Projects to Prevent Tooth Decay. Tooth decay is a major health problem in the United States, especially among children. The National Caries Program of NIDR initiated 17 projects in 1975 with children in kindergarten through the eighth grade, in which over 80 percent of the students in the respective communities participated in weekly mouth-rinsing with fluoride. Although Federal funding of 12 of these projects was discontinued in February 1979, all 12 received local funding to continue the weekly rinse regimen. Federal support of the remaining five projects, which now include high school students, continued through April 1980. Results of the original studies are now being analyzed.

Media Projects Caries Prevention. Presently known for preventive measures can provide significant protection against the ravages of tooth decay among children. Nevertheless, a large portion of the public remains unaware that the use of fluorides can bring about improved dental health. The National Caries Program of the NIDR has initiated a vigorous health education activity to inform both the general public and health professionals about effective prevention of dental caries through water fluoridation and through other methods of fluoride application. Efforts include exhibits, leaflets and films. Well over 200,000 copies of the posters and leaflets have been distributed. The audience for the film "Reading, Writing, and Rinsing," which continues to be used on television, was estimated at 6.2 million in 1979.

National Heart, Lung, and Blood Institute (NHBLI)

The National Heart, Lung, and Blood Institute is the central coordinating agency for diseases of the heart, lungs, and blood. It supports research and professional training in these areas, and provides educational programs for laypersons and health care personnel.

NHBLI Prevention Highlights

Hypertension Detection and Follow-Up Program (HDFP). (See Chapter 1.)

Public Service Announcements About High Blood Pressure. A new radio and television campaign has been launched to continue emphasis on the necessity of regular treatment for high blood pressure. Messages with the theme "High Blood Pressure—Treat It and Live" have been distributed to television and radio stations. The public service message is one of the major sources of health information for the American public. Previous "spots" on high blood pressure, given generous time by the stations, appear to have contributed to improved public understanding of high blood pressure in recent years. The Institute will arrange systematic monitoring of these messages over the next three years; moreover, a trail assessment will be made of the effect of media hypertension messages on health care providers.

Recommendations on Health Needs of the Black Community. The Black Health Care Providers Task Force was established in 1977 and included representatives of predominantly Black health professional associations and the legal association as well as the Executive and Legislative branches of the Federal government. In 1980, the Task Force issued a list of 80 recommendations on the health needs of the Black community. The most important objectives identified by the Task Force were (1) that between 1981 and 1985, effective control (diastolic blood pressure of less than 90 mm Hg) be attained for at least 50 percent of hypertensive Black Americans, and that in each succeeding five-year period, at least 50 percent of the remaining hypertensive Black Americans attain control at this level; and (2) that among persons in the 90 to 140 mm Hg diastolic blood pressure range, the percentage be reduced of Black Americans whose hypertension is either undetected, detected but not being treated, or detected and being treated but not under control.

Nutrition Counseling Education. The third and fourth of an initial series of four workshops on nutrition counseling were held in Seattle, in May 1980, and Atlanta, in September 1980. These workshops affected an estimated 200 individuals. (The first two workshops were held in

1978 in Newark, New Jersey, and in 1979 in St. Louis, Missouri.) These workshops were designed to help nutrition practitioners improve their counseling skills. NHLBI worked with the American Heart Association (AHA) and used a national network of AHA nutritionists to man age local workshops. The AHA is preparing a how-to-do-it manual to encourage local groups to plan and conduct more workshops' and the NHLBI has in progress a book entitles *HEART-TO-HEART: A Manual on Nutrition Counseling for the Prevention of Coronary Heart Disease,* a text for these workshops that will be promoted nationally to nutritionists and dietitians.

Dietary Control of Lipoproteins. During 1980, NHLBI distributed more than 387,000 copies of "Diatary Management of Hyperlipo proteinemia." This series of publications comprises a Handbook for Physicians and Dietitians and patient manuals for each of the hyper lipidemias. These manuals will assist the health professional in reducing a patient's elevated lipid level, by diet, to a normal range. This effort has been in progress since 1971, with 7.8 million copies in the series having been distributed. In Fiscal Year 1981, an evaluation of these publications will be made to determine whether revision of the presentation of material is warranted and to assess the distribution methodology.

National Institute of Neurological and Communicative Disorders and Stroke (NINCDS)

The National Institute of Neurological and Communicative Disorders and Stroke (NINCDS) supports research in the areas of neurological and communicative disorders and stroke. Its goals include reducing incidence of hearing, language, and speech disorders, which are estimated to afflict 20 million Americans, and reducing both the incidence of stroke and deaths resulting from stroke. Emphasis is also placed on the central nervous system as a measure of gaining insight into the unique role of the brain in influencing pathways of central information to metabolic status, through biologically active substances that influence the normal state and deviations from it that constitute the early onset of pathogenesis (prebiologic and preclinical).

NINCDS Prevention Highlights

New Section on Neurotoxicology. A new work unit was created to investigate toxic sub stances that affect the nervous system and to maintain active contact between NINCDS and the National Toxicology Program (NTP), which has overall responsibility for testing hazardous chemicals. In 1979 the Neurotoxicology Section published data on the neurological toxicity of the food dye Red III and its structural analogues and the effect of low doses of estrogen on brain function. These results eventually led to clinical studies with direct implications for early detection of central nervous system disorders. The Section is currently supporting intensive research on the mechanisms of toxin-induced changes in the nervous system. The findings of this research will contribute to the early detec tion and prevention of such neurological and communicative disorders as multiple sclerosis, and deafness.

New Research Technique (PETT). NINCDS has awarded about $11 million in FY 1980 to seven national centers to expand research on a new technique called *positron emission trans verse tomography* (PETT). This technique uses a radioisotope and a scanning device that allows neuroscientists to study the human brain (its physiology and biochemistry) *in vivo*—that is, alive and functioning—without any traumatic invasion of its structure or interference in its function. This new, exciting technique will enhance understanding of normal brain activity and of the underlying physiopathogenesis of such neurolog ical disorders as multiple sclerosis, Huntington's disease, Alzheimer's disease, stroke, and brain tumor.

Division of Research Resources (DRR)

DRR strives to improve national research resources, and its responsibilities include helping institutions establish and operate general clinical research centers for studying human diseases in patients; increasing and improving laboratory animal facilities and resources, such as primate research centers; and providing a unified approach to improving institutional, regional, and national health research.

DRR Prevention Highlights

Reduction of Atherosclerosis in Monkeys. Dietary studies with monkeys indicate that supplements of alfalfa meal added to various diet regimens reduce the extent of aortic and coronary atherosclerosis in these animals. Alfalfa meal apparently counteracts the deleterious effect of dietary cholesterol on monkeys, and these findings could be applicable to humans.

Support for Blacks With Hypertension. High blood pressure can usually be controlled through early diagnosis and strict adherence to the treatment regimen; however, patients often abandon their medication regimes because of painful side effects. Since blacks are particularly susceptible to high blood pressure, a Minority Biomedical Support Program was established to increase patient compliance with prescribed hypertension treatment. The program stationed students from Xavier University College of Pharmacy at pharmacies in predominantly black areas of New Orleans, Louisiana, so that they could encourage black hypertension patients using medication to adhere to their drug regimens. This technique of personal contact between black patients and pharmacists resulted in improved compliance by the patients with their prescribed treatment.

Health Care Financing Administration (HCFA)

The Health Care Financing Administration (HCFA) provides reimbursement for medical care of the elderly and the socioeconomically deprived, develops and enforces standards for the quality of health care, and conducts intensive efforts to prevent fraud and abuse in its programs. Medicare and Medicaid are its two major health care programs. The agency includes in its goals the promotion of timely, cost-effective delivery of appropriate health care services to program beneficiaries; making beneficiaries aware of, and assuring their access to, the services for which they are eligible; and ensuring that its policies and actions promote quality and efficiency throughout the health care delivery system. In 1980, HCFA, in conjunction with the Public Health Service, intensified its child health promotion efforts. Furthermore, health promotion efforts directed to Medicaid and Medicare adults are being developed, with Public Health Service support.

HCFA Prevention Highlights

Regulations for Family Planning. All State Medicaid programs are required to provide family planning services. During 1979 HCFA developed new regulations for family planning programs funded by Medicaid. These regulations permit reimbursement for counseling, sterilization reversal procedures, and education for natural family planning to eligible Medicaid beneficiaries. The availability of these services through Medicaid will contribute to the emotional health of those individuals who need family planning assistance.

National Second Surgical Opinion Program. In September 1978 HCFA initiated the National Second Surgical Opinion Program to improve quality of care by encouraging health care consumers to inform themselves fully about alternatives to surgery, and the risks and benefits of treatment alternatives, before deciding whether to undergo elective surgery. This program also seeks to help patients contain costs by facilitating discovery and use of less costly alternatives to surgery. It has established both a national network of referral centers that provide physicians' names to persons seeking second opinions, and a national hotline. Approximately 1,500 people use the hotline number each month.

Information Services for the Elderly and the Young. A series of brochures entitled "Self-Care Health Practices for the Elderly" have been issued by HCFA to address problems of prevention such as safe home care, maximizing the health care dollar, fitness, relaxation, diet and nutrition, and communicating with one's doctor. Promotion by HCFA of consumer/physician awareness of the Medicaid Early Periodic Screening Diagnosis and Treatment Program (EPSDT) will benefit Medicaid-eligible children who may not be receiving services to which they are entitled.

Early Periodic Screening, Diagnosis and Treatment Program (EPSDT). Approximately 2,010,000 eligible Medicaid children were screened in FY 1980. HCFA will soon publish a new pamphlet to promote the Early Periodic Screening, Diagnosis, and Treatment Program. In addition, two very successful regional promotional programs were initiated to promote EPSDT and general good health practices for children. Posters, buttons, patches, and media materials were developed in conjunction with those campaigns.

Demonstration Projects. Several demonstration projects were funded to provide self-care educational programs to HCFA beneficiaries. Target populations included AFDC Medicaid mothers and Medicare seniors. As these projects terminate, the grantees will develop and perform evaluations of their effectiveness. As a result of these efforts, seniors are becoming increasingly aware of the value of self-care education.

Office of Human Development Service (OHDS)

OHDS sponsors social services and human development programs responding to specific groups with recognized needs. About 80 percent of OHDS funds are dispersed as grants-in-aid to States that operate their own programs, such as those for low-income individuals, families, persons with developmental disabilities, runaway youths, the elderly, and Native Americans. The goal of the Head Start Bureau of the Administration for Children, Youth, and Families is to bring about a greater degree of special competence in children of low-income families. Head Start health services emphasize prevention, early identification, treatment, and rehabilitative aspects of childhood illness as well as the involvement of the family in an ongoing health care system that will continue after the children leave the Head Start program.

OHDS Prevention Highlights

Immunization Initiative. The Head Start Bureau, ACYF, collaborated with the Public Health Service in attaining the goals of the National Immunization Initiative. All full-year programs participated in the initiative by providing immunizations for all children enrolled in Head Start. Information about child health and immunization services in their communities was highlighted in education for new parents and provided in Head Start parent and staff meetings and newsletters. In addition, the Head Start Bureau developed a pamphlet, "Shots and Drops, A Guide for Parents to Immunization," which has been distributed to Head Start parents and the public. Approximately 34,000 children were reached through this effort. The services offered were in the areas of outreach, child care, transportation, referral, and direct provision of immunizations in medically underserved areas.

Older Americans Health Fair Day. In May 1979, Older Americans Health Fair Day was conducted in 42 states and territories at 415 community sites. Approximately 80,000 senior citizens participated in health fairs during this project. The equivalent value of $10 million in community equipment, facilities, and volunteer services was donated during the 1979 Older Americans Health Fair program. A repeat effort was sponsored in 1980. The health fairs were primarily the result of cooperative efforts by the area agencies on aging and the local American Red Cross Chapters, with oversight and the collection of programmatic and statistical data provided by the National Health Screening Council for Volunteer Organizations, Inc. The Health Fair Model includes health education, screening tests, counseling and referral, and follow-up of participants found to have significantly abnormal test results. As an outcome of this health fair effort, a guide has been developed for communities interested in organizing health fairs for older Americans. Entitled *Older Americans Health Fair Training and Orientation Guide,*

this publication describes the techniques and procedures for establishing and operating health screening and follow-up components of health fairs.

Food Programs for the Elderly. The Nutrition Services Program for Older Americans, authorized by Title III(c) of the Older Americans Act, provides low-cost, nutritionally sound meals and other nutrition services, including outreach and nutrition education, to older persons, particularly those with the greatest economic or social needs. Support is authorized for both congregate and home-delivered meal services. In Fiscal Year 1979, there were 1,162 nutrition program projects with approximately 11,771 sites located in communities or neighborhoods where meals were served. Sixty-four percent of the meals were served to persons below the poverty threshold. The average number of meals served daily in FY 1979 was 587,865.

Child Abuse and Neglect Programs. Eleven innovative primary prevention projects designed to prevent child abuse and neglect were funded by OHDS in FY 1979. Three are focusing on parent-infant bonding and perinatal parent support programs; two are outreach-oriented parental information and referral programs; and the remainder are using various approaches to parent education on child development and coping with family problems. Because these projects have been in their start-up period during the past fiscal year, preliminary findings are not yet available. A collaborative research project has also been funded to evaluate process and impact issues related to the prevention projects.

Other Federal Agencies

Department of Agriculture (USDA)

Prevention programs administered by the USDA include food and nutrition programs directed to infants, children, pregnant women, mothers, the elderly, and low-income persons. Perhaps most notable is the Special Supplemental Food Program for Women, Infants and Children (WIC); other programs focus on nutrition education, nutrition research, food quality and safety, pollution control and abatement, and environmental protection. Nine agencies within USDA administer these prevention programs.

USDA and DHHS convene an interdepartmental work group composed of senior officials meeting quarterly to improve interaction and program coordination between the two Departments. Joint achievements include an inventory of nutrition education materials, development of an integrated nutrition surveillance and monitoring system, and *Nutrition and Your Health,* the dietary guidelines discussed in this volume under the DHHS Nutrition Coordinating Committee.

USDA Prevention Highlights

National School Lunch Program: Revised Regulations. In response to current interest in the relationship between health problems and consumption patterns for sugar, fat, and salt, USDA has revised the regulations for its School Lunch Program to enhance the availability of unflavored fluid low-fat milk, skim milk, or buttermilk, as well as foods with lower levels of sugar, salt, and fat. USDA has also sponsored a demonstration project to study methods of improving the nutrition profile of school lunches.

Nutrition Education Demonstration Projects. USDA awards grants to States to conduct nutrition education demonstration projects. The projects are part of the Nutrition Education and Training Program, which encourages effective dissemination of nutrition information to children and provides in-service training to food service and teaching personnel.

Mass Media Pilot Project. A USDA Mass Media Pilot Project is currently studying children's attitudes and practices regarding snacking. Educational materials will be developed for presentation on television and in schools, grocery stores, and other places in the community frequented by children and their parents.

Community Services Administration (CSA)

The Community Services Administration, successor to the Office of Economic Opportunity, administers community action and community economic development programs designed to help low-income families and individuals. Health and prevention-related programs deal with such problems as housing, food and nutrition, medical care for the elderly poor, community food and nutrition services that supplement the USDA's larger programs, youth sports programs, and summer recreation for disadvantaged youth. The Community Action Agencies, funded by CSA and other local programs, provide opportunities for organizing health promotion projects at the community level to serve the poor in both rural and urban areas.

U.S. Consumer Product Safety Commission (CPSC)

The Consumer Product Safety Commission is an independent regulatory agency established by Congress in 1973 to reduce the risk of injury, illness, or death resulting from the use of consumer products. The Commission administers five statutes that provide a broad range of legal and other remedies to eliminate hazards related to products used in the home, at school, or for recreation. To achieve its goals, the Commission relies on integrating mandatory product standards developed by industry with consumer education. DHHS and CPSC have cooperated on several projects related to accidental injury control, including a study to improve the National Electronic Injury Surveillance System.

CPSC Prevention Highlights

Chronic Chemical Hazards. The Commission has been increasing its efforts to control consumer exposure to chemicals that pose chronic health hazards, especially carcinogens present in consumer products. CPSC obtained the voluntary cooperation of manufacturers of hair dryers that contain asbestos—a recognized cause of lung cancer—in removing these products from the market and in recalling units previously sold to consumers.

Child-Resistant Packaging Requirements. Each year, health professionals treat an estimated two million children for ingestion of potentially dangerous substances. The Commission's most significant accomplishment in preventing these injuries was issuing regulations that require child-resistant packaging for 14 categories of hazardous substances including prescription drugs. According to

the most recent estimate, poisonings of children under five years of age have decreased by about 50,000 a year, and the number of deaths by half, as a result of these regulations.

Children's Toys. In 1980 the Commission issued standards to prevent injury from the sharp points or edges of toys. A second regulation addressed the problem of parts from toys—a special hazard to very young children, who tend to place objects in their mouths.

Outdoor Mechanical Equipment. In 1980 the Commission issued standards for power mower blades that are expected to eliminate 80 percent of blade-related injuries. A second project involves eliciting the cooperation of industry to develop a voluntary safety standard for chain saws.

Department of Education

The Department of Education, created as a Cabinet-level department in 1980, administers and coordinates most Federal assistance for education programs. Projects are supported for development of school health education curricula, especially for alcohol and drug abuse education. The findings are disseminated to State education agencies and local school districts.

Office of Comprehensive School Health (OCSH)

Health promotion and disease prevention through the education of schoolchildren is a major goal of OCSH. Established in 1979, in the Office of Education's Bureau of School Improvement, OCSH provides advice on school health policy, responds to inquiries from government components and the public, identifies and showcases model school health programs, provides a focal point for school health instruction and services within the Department of Education, and collaborates with other agencies that have health-related programs. The Office has collaborated with the Office of Health Information, Health Promotion, and Physical Fitness and Sports Medicine and the CDC Bureau of Health Education on an evaluation of the School Health Curriculum Project, the review of applications for the risk reduction grant program, and the National Conference on Promoting Health Through the Schools.

Environmental Protection Agency (EPA)

One of the Environmental Protection Agency's principal purposes is protection of health. Its activities in pollution abatement and control, enforcement of antipollution laws and regulations, and research and development in support of standards and control strategies all contribute importantly to health protection. Research programs at EPA are designed to identify potential environmental problems, examine possible carcinogens in environmental pollutant exposures, and develop exposure-monitoring concepts and techniques. Major program areas are: air quality, water quality (including safe drinking water), pesticides, radiation, solid waste, toxic substances, and noise.

EPA Prevention Highlights

Curriculum for Environmental Medicine. The Task Force on Environmental Cancer and Heart and Lung Disease is chaired by EPA personnel. As a result of involvement in the Task Force's Working Group on Education of the Public and Health Professionals, EPA has initiated several programs to improve the capability of physicians to recognize and treat environmentally-related diseases. The programs include promoting the development of educational curricula for medical students, house staff, and practicing physicians; regional workshops on topics in environmental medicine for physicians; and symposia and printed information on environmental medicine for national meetings of health professionals.

Coordination with DHHS. Several measures undertaken in 1980 by EPA and DHHS are designed to improve interaction between the two agencies. Beyond the formal relationship established through participation in the National Toxicology Program, informal liaison has been established on a number of critical health issues such as toxic waste disposal, radiation, indoor air pollution, and asbestos. An interagency agreement is being developed, and the two agencies are cooperating on studies of the health effects of problems at the Love Canal in New York. EPA also supports research through the FDA's National Center for Toxicological Research.

Federal Trade Commission (FTC)

The FTC is responsible for enforcing the antitrust laws; for regulating cigarette labeling and advertising; and for protecting consumers from unfair or deceptive acts or practices in the advertising, packaging, and labeling of specified consumer products. With respect to disease prevention and health promotion, the Commission investigates two categories of activity: (1) low enforcement and rule-making initiatives designed to prevent the dissemination of false or deceptive information about health or health-related consumer

products, and (2) enforcement of antitrust laws with respect to health care in order to increase access to individual health providers or organized plans that emphasize disease prevention and health promotion. The FTC has worked with DHHS on a proposed rule regarding advertising directed toward children and in monitoring cigarette advertising.

FTC Prevention Highlights

Proposed Rules for Food and Health Advertising. In 1980, the FTC proposed a series of rules that would: limit unsubstantiated health promotion claims in food advertising, prevent exaggeration of benefits in the merchandising of hearing aids; prohibit advertising for over-the-counter drugs that exceeds the claims approved for package labels by the FDA; and require warnings in advertisements for antacid products, disclosing their sodium content and directing purchasers to read the package labels.

Orders Preventing the Curtailment of HMOs. To foster the availability of health care providers who emphasize early intervention and the prevention of serious illness, the FTC has issued orders against organizations that have taken collective action to inhibit the development of health maintenance organizations in violation of the antitrust laws.

Department of Housing and Urban Development (HUD)

Prevention-related activities of the Department of Housing and Urban Development include as contributors to health promotion goals and programs: community development block grant programs for property acquisition, construction of public facilities, rehabilitation of buildings, and provision of social services; environmental planning activities, including assessment criteria, building codes, and strategies for solving environmental problems; safety and construction standards for mobile homes; and annual data collection on physical conditions of housing units.

HUD Prevention Highlights

Alcoholism Outreach Program. Alcoholism and alcohol-related problems occur in all segments of the population, including people living in public housing. HUD and the DHHS's National Institute on Alcohol Abuse and Alcoholism have an interagency agreement establishing an Alcoholism Outreach Program. During the past year, NIAAA has conducted a series of workshops to facilitate programs to reduce alcoholism and other alcohol-related problems in public housing, and to alleviate their effects on family life.

Screening, Diagnosis, and Treatment Program. HUD is cooperating with the Health Care Financing Administration to improve the delivery of Early and Periodic Screening, Diagnosis, and Treatment Program (EPSDT) services for Medicaideligible children living in HUD public housing.

Environmental Assessment of Housing Sites for the Elderly. HUD has developed a guidebook to assist field staff in assessing the environmental quality of housing and housing sites for the elderly. Topics covered in the guide range from issues related to air and noise pollution, through community fire, police, and emergency health services, to design features affecting access to the site. DHHS has provided technical assistance on the special health problems of the elderly.

Department of the Interior (DOI)

As the Federal agency with responsibility for national parks and recreation, the Department of the Interior has substantial potential to enhance prevention activities. Its Heritage Conservation and Recreation Service (HCRS) has participated in many programs to promote physical well-being and health. Created in 1978, HCRS administers programs designed to conserve the national heritage through preservation of natural resources and to ensure opportunities for recreation for future generations.

DOI Prevention Highlights

Exercise Trails. HCRS has developed more than 600 exercise trails throughout the United States to provide a free, low-maintenance, community recreation facility that encourages physical well-being. This program was inspired by a belief in the vital interrelationship of recreation with mental and physical health. The trails program elicited the cooperation of the U.S. Jaycees, the President's Council on Physical Fitness and Sports, and benefactors from private industry.

Urban Recreation/Health Promotion. HCRS provides grants to local governments to help physically and economically distressed urban areas improve recreation opportunities for the 70 percent of the population who live in urban areas. Activities may include rehabilitating existing indoor and outdoor recreation facilities; demonstrating innovative ways to enhance park and recreation opportunities at the neighborhood level; and developing local restoration programs that identify community needs, objectives, action priorities, and strategies for revitalizing the total public and private recreation system. HCRS has

worked with DHHS on ways to encourage health promotion activities through recreation programs and facilities.

Department of Labor (DOL)

Within the Department of Labor are the two principal agencies responsible for standard-setting and enforcement in the area of occupational safety and health: the Occupational Safety and Health Administration (OSHA) and the Mine Safety and Health Administration (MSHA). The mandate given to OSHA by the Occupational Safety and Health Act of 1970 is to assure safe and healthful conditions for workers. The agency attempts to achieve this goal primarily through the establishment and enforcement of mandatory standards for working conditions, tools, equipment, facilities, and processes. Enforcement of standards is accomplished through the physical inspection of plants and facilities to assure compliance with Federal standards and the cessation of occupational safety and health problems. Standards are based on research and recommendations of DHHS's National Institute for Occupational Safety and Health (NIOSH) and special advisory committees and other Federal and State agencies.

MSHA was established by the Federal Mine Safety and Health Act of 1977. Its activities include the development, promulgation, and enforcement of health and safety standards; assistance in mine rescue operations; investigations of serious accidents in mines; recommendations to reduce hazards to workers; safety education and training; and technical support for field managers, mine inspectors, State program employees, and industry management.

DOL Prevention Highlights

Asbestos Alert — Phase II. OSHA and the National Cancer Institute (NCI) have jointly sponsored a second Asbestos Alert Campaign directed to workers as well as their families who have been directly or indirectly exposed to asbestos. This national media campaign is designed to encourage workers to follow practices that would reduce their exposure to asbestos, and to investigate workers' attitudes and practices related to occupational safety and health. Another major objective of the program is to prepare physicians to respond to inquiries about asbestos-related disease that may arise from this campaign and to examine exposed workers with regard to their age, duration of exposure, and smoking behavior. The campaign includes regional training workshops and conferences, public service announcements on radio and television, and transportation displays.

New Directions Grant Program. OSHA has continued to award planning and development grants under its New Directions Program to create education and training materials and to provide technical assistance to help control work-related illnesses and to eliminate workplace hazards. Because of its role in promoting the recognition and control of carcinogens in the workplace, the National Cancer Institute has also supported OSHA by funding part of this program. Among the grant recipients are unions, trade associations, labor education departments of colleges and universities, and various nonprofit organizations dedicated to health promotion among workers. Grantees have created training materials and conducted workshops and conferences to educate employers and workers in hazard control and health practices. They have produced films, publications, and slide/sound presentations, as well as conducted research to gather statistics concerning health and safety conditions.

Physician Residency Program. OSHA has created a physician residency program designed to provide physicians-in-training with experience and insight into occupational health problems. Residents from approved occupational medicine training programs spend from one to three months within the agency working directly with OSHA physicians and participating in investigations.

Department of Transportation (DOT)

DOT assumes an important role in transportation safety and in the environmental impact of transportation. Prevention-related programs are conducted by various DOT agencies: the Coast Guard, for marine environmental protection and boating safety; the Federal Aviation Administration, for safety of civilian aircraft, personnel, passengers and freight, as well as for pollution control; the Federal Highway Administration, for highway safety and motor carrier safety; the Federal Railroad Administration, for motor vehicle standards, traffic safety, and consumer information; the Research and Special Programs Directorate, for safe transportation of dangerous cargoes; the Transportation Systems Center, for motor, rail, and aircraft safety research; and the Urban Mass Transportation Administration, for air pollution control devices for buses and for features that facilitate use by the elderly and the handicapped. Of particular importance is the National Highway Traffic Safety Administration, which promulgates safety standards for motor vehicles, conducts public consumer information programs,

and implements other programs to reduce deaths, injuries, and economic losses resulting from traffic accidents.

DOT Prevention Highlights

Child Passenger Protection. To prevent the 1,500 deaths and 35,000 hospital-reported injuries that occur every year in traffic accidents involving children less than five years old, the National Highway Traffic Safety Administration is promoting child passenger information and is encouraging the implementation of "loan-a-seat" rental or recycling programs to make these seats available to low-income families at a reduced price. To generate the cooperation of Federal and State agencies and private organizations, NHTSA convened a National Conference on Child Passenger Protection in December 1979. In addition, DHHS and NHTSA have worked together to incorporate motor vehicle safety into the PHS accident prevention strategies and to assist the American Academy of Pediatrics in launching the "First Ride . . Safe Ride" program.

Department of the Treasury

Law enforcement agencies of the Department of the Treasury contain important prevention activities. The Bureau of Alcohol, Tobacco, and Firearms (BATF) regulares the alcohol, tobacco, legal firearms, and explosives industries. DHHS works with BATF on issues related to alcohol use and cigarette excise taxes.

Department of the Treasury Prevention Highlights

Fetal Alcohol Syndrome Campaign. BATF is conducting an information campaign to warn the public in general, and women of child-bearing age in particular, that consumption of excessive amounts of alcohol during pregnancy increases the risk of both physical and mental birth defects. The most severe example is that represented as the Fetal Alcohol Syndrome (FAS). The FAS campaign is eliciting the cooperation of other Federal and State agencies, the alcoholic beverage industry, and private health organizations.

Chapter 4:

Prevention Inventories

To produce a more complete picture of prevention activities within the Department of Health and Human Services, this chapter presents a comprehensive inventory of the Department's prevention programs and projects. In 1977, the first inventory of DHHS prevention programs was conducted and published as an appendix to *Disease Prevention and Health Promotion: Federal Programs and Prospects.* This earlier inventory has been reorganized and updated according to 16 categories—the fifteen prevention priority areas of *Healthy People,* and another category of cross-cutting activities. The inventory includes programs of the Public Health Service, the Health Care Financing Administration, and the Office of Human Development Services. Resource levels are reported for Fiscal Year 1979 and Fiscal Year 1980.

Several caveats about the inventory are important to note. In some cases, the amounts provided by Fiscal Year 1980 are estimates that will be revised for the next annual report. Furthermore, each agency applied its own criteria, within general guidelines, identifying its prevention activities. For example, the National Institutes of Health reported only primary prevention research activities, whereas other agencies may have included secondary prevention efforts.

Finally, some programs, such as Medicaid, provide preventive health services, but current reporting systems cannot identify the specific sums spent for these services. In some cases, an estimate is provided; in others, the sum is excluded.

The following list is a key to footnoted items.

a. Funded with U.S.-owned foreign currencies obligated in prior years.
b. Dollar amount for FY 80 not available.
c. Estimate based on proportion of actual visits spent on this activity.
d. Plus significant but underdetermined portion of program funds.
e. No BMS funds expended.
f. Total figure is for all geriatric services, of which smoking cessation is a part.
g. Discrete services only. Services for this purpose are also included as a component of several services in a number of states.
h. Covers period 6/1/79 through 3/31/80.
i. Covers period 6/1/78 through 5/31/79.

Table 1.
FY 1979 and FY 1980 Resources
For Prevention Activities by Agency
Department of Health and Human Services

Agency	1979 Resources*	1980 Resources*
Public Health Service		
Alcohol, Drug Abuse, and Mental Health Administration	$ 26,287,027	$ 26,335,051
Centers for Disease Control	329,784,500	363,684,965
Food and Drug Administration	318,671,000	339,609,000
Health Resources Administration	10,044,821	8,283,507
Health Services Administration	879,587,946	895,738,032
National Institutes of Health	435,171,263	477,128,940
Office of the Assistant Secretary for Health	7,255,856	12,131,980
Health Care Financing Administration	148,000,000	173,195,877
Office of Human Development Services	816,368,676	1,234,297,587
Total Resources	**$ 2,971,171,089**	**$ 3,530,404,939**

*Reported by individual agencies.

Table 2.
FY 1979 and FY 1980 Resources
By Prevention Priority Area
Department of Health and
Human Services

Prevention Priority Area	1979 Resources*	1980 Resources*
1. Family Planning	$ 392,709,279	$ 459,750,567
2. Pregnancy and Infant Care	371,704,910	412,365,637
3. Immunizations	129,421,938	110,507,594
4. Sexually Transmitted Diseases	57,958,208	63,027,822
5. High Blood Pressure Control	23,915,597	33,556,320
6. Toxic Agent Control	188,662,310	230,682,985
7. Occupational Safety and Health	92,963,460	118,349,713
8. Accident Prevention and Injury Control	16,983,428	21,831,654
9. Fluoridation and Dental Health	5,554,804	11,785,932
10. Surveillance and Control of Infectious Diseases	238,267,660	245,082,089
11. Smoking and Health	14,137,975	18,095,992
12. Misuse of Alcohol and Drugs	105,057,865	145,288,367
13. Improved Nutrition	407,910,692	480,070,191
14. Physical Fitness and Exercise	4,181,643	4,521,036
15. Control of Stress and Violent Behavior	7,538,812	6,284,491
16. Cross-Cutting and Other	914,202,508	1,169,204,549
Total Resources	**$2,971,171,089**	**$3,530,404,939**

*Reported by individual agencies.

Table 3.
DHHS Agencies Reporting
Prevention Activities in 1980
By Priority Area

Department of Health and Human Services Agencies / Prevention Priority Areas	1. Family Planning	2. Pregnancy and Infant Care	3. Immuniza-tions	4. Sexually Transmitted Diseases	5. High Blood Pressure Control
Public Health Service					
Alcohol, Drug Abuse, and Mental Health Administration	$ —	$ —	$ —	$ —	$ —
Center for Disease Control	1,606,000	1,005,000	30,288,000	47,479,000	—
Food and Drug Administration	—	—	11,200,000	—	—
Health Resources Administration	—	—	—	—	—
Health Services Administration	225,627,442	338,377,020	47,649,592	6,448,422	20,000,000
National Institutes of Health	29,210,765	59,326,080	21,370,002	9,100,400	13,556,320
Office of the Assistant Secretary for Health	1,350,000	6,651,155	—	—	—
Health Care Financing Administration	120,000,000	—	—	—	—
Office of Human Development Services	81,956,360	7,006,382	—	—	—
Total Resources Reported	**$459,750,567**	**$412,365,637**	**$110,507,594**	**$63,027,822**	**$33,556,320**

6. Toxic Agent Control	7. Occupational Safety and Health	8. Accident Prevention and Injury Control	9. Fluoridation and Dental Health	10. Surveillance and Control of Infectious Diseases	11. Smoking and Health	12. Misuse of Alcohol and Drugs	13. Improved Nutrition	14. Physical Fitness Exercise	15. Control of Stress and Violent Behavior	16. Cross-cutting and Other	Total
$ —	$ —	$ —	$ —	$ —	$ —	$ 14,507,322	$ —	$ —	$ 1,197,840	$10,629,889	**$ 26,335,051**
4,510,000	79,407,000	11,784,000	6,773,000	61,255,965	4,400,000	—	3,600,000	—	—	111,577,000	**363,684,965**
85,877,000	—	709,000	—	15,874,000	—	69,388,000	51,637,000	—	—	104,924,000	**339,609,000**
—	142,748	—	—	54,971	—	—	1,966,099	—	—	6,119,689	**8,283,507**
50,000	17,100,000	4,137,380	—	155,208,800	457,373	14,445,000	11,892,364	—	—	54,344,639	**895,738,032**
140,245,985	21,699,965	5,000,000	5,012,932	12,688,353	11,164,924	1,251,545	25,834,702	3,921,036	4,495,758	113,250,173	**477,128,940**
—	—	201,274	—	—	2,073,695	50,719	—	600,000	194,696	1,010,441	**12,131,980**
—	—	—	—	—	—	—	—	—	—	53,195,877	**173,195,877**
—	—	—	—	—	—	45,645,781	385,140,026	—	396,197	714,152,841	**1,234,297,587**
$230,682,985	**$118,349,713**	**$ 21,831,654**	**$ 11,785,932**	**$245,082,089**	**$ 18,095,992**	**$145,288,367**	**$480,070,191**	**$ 4,521,036**	**$ 6,284,491**	**$1,169,204,549**	**$3,530,404,939**

Table 4.
FY 1979 and FY 1980 Prevention Inventories
By Agency and Priority Area
Department of Health and Human Services

1979 Total $392,709,279
1980 Total $459,750,567

Public Health Service

		1979 Resources	1980 Resources	Services	Research	Health Professions Development
Center for Disease Control	**Bureau of Epidemiology**					
	Abortion Surveillance and Epidemiologic Investigation of Risk	$ 297,900	$ 231,000	●	●	
	Contraceptive-Related Surveillance and Epidemiological Research	1,296,600	1,007,000	●	●	
	Bureau of Health Education					
	PTA (parenting) Project	305,000	—	●		
	Sex Education Study—Programs for Youth Aged 10-19 Years	1,720,000	368,000	●		
Food and Drug Administration	**Bureau of Biologics**					
	Study in Egypt of Correlations of Human Semen Parameters with Fertility and Assessment of Risks Associated with Microbial Contaminants of Semen (with The Office of International Health, OASH)	a	—			●
Health Services Administration	**Bureau of Community Health Services**					
	Family Planning	135,000,000	162,000,000	●		
	Community Health Centers	23,500,000	28,770,000	●		
	Migrant Health	2,400,000	2,760,000	●		
	Maternal and Child Health/Crippled Children	25,000,000	25,000,000	●		
	National Health Service Corps	4,300,000	5,060,000	●		
	Bureau of Medical Services					
	Family Planning Services	36,800	141,942c	●		
	Family Planning Research	44,800	b			●

		1979 Resources	1980 Resources	Services	Research	Health Professions Development
	Contraceptive Use and Family Planning	$ 3,500	$ 3,500	●		
	Indian Health Service					
	Clinical Services and Preventive Health	1,856,933	1,892,000	●		
National Institutes of Health	**Division of Research Resources**					
	Family Planning Research	5,875	6,765		●	
	National Institute of Child Health and Human Development					
	Social and Behavioral Research	10,176,000	11,480,000		●	
	Human Infertility	1,749,000	1,796,000		●	
	Contraceptive Development	7,169,000	8,256,000		●	
	Contraceptive Evaluation	5,424,000	7,672,000		●	
Office of the Assistant Secretary for Health	**Office of Population Affairs**					
	The overall planning, oversight, coordination, monitoring, and evaluation of the family planning service programs administered by the Health Services Administration, the Health Care Financing Administration, the Office of Human Development Services, and the Office of Adolescent Pregnancy Programs	220,000	220,000	●		
	The overall planning, oversight, coordination, monitoring, and evaluation of the population and family planning research programs administered by the Health Services Administration, the National Center for Health Statistics, the National Institutes of Health, the Center for Disease Control, and the Food and Drug Administration	130,000	130,000			●

		1979 Resources	1980 Resources	Services	Research	Health Professions Development
	Office of Health Research, Statistics, and Technology/National Center for Health Statistics					
	National Survey of Family Growth	$ 800,000	$ 1,000,000		●	
Health Care Financing Administration	**Bureau of Program Operations**					
	Medicaid Support for Family Planning	99,000,000	120,000,000	●		
Office of Human Development Services	**Administration for Children, Youth, and Families**					
	Head Start/Parent Education Program and Parent-Child Center	200,000	—	●		
	Office of Program Coordination and Review					
	Family Planning Services, Education (Title XX)	72,073,871	81,956,360	●		

Public Health Service

		1979 Resources	1980 Resources	Services	Research	Health Professions Development
Center for Disease Control	**Bureau of Epidemiology**					
	Epidemiological Research on Birth Defects	$ 330,000	$ 667,000		●	
	Bureau of Laboratories					
	Laboratory Applied Research	—	338,000	●	●	
Health Resources Administration	**Bureau of Health Professions**					
	Publication "Child Health Assessment Study"	7,575	—	●		
	Maternal-Child Health Continuing Education for Nurses—University of Washington	165,000	—			●
Health Services Administration	**Bureau of Community Health Services**					
	Sudden Infant Death Syndrome (SIDS) Program	2,802,000	2,802,000	●		
	Community Health Centers	117,575,000	144,040,000	●		
	Migrant Health	13,650,000	15,710,000	●		
	Maternal and Child Health/Crippled Children	112,350,000	112,350,000	●		
	National Health Service Corps	27,575,000	32,400,000	●		
	Health Awareness (SIDS, Sickle Cell, Hemophilia)	3,100,000	3,100,000	●		
	Screening, Identification, and Services for Blood Disorders/Genetics Program	6,575,000	6,575,000	●		
	Screening, Identification, and Services for Metabolic Disorders/Maternal and Child Health	1,900,000	1,900,000	●		
	Screening, Identification, and Services for Chromosomal Abnormalities and General Genetic Diseases/Maternal and Child Health/Genetics Program	5,900,000	9,900,000	●		

	1979 Resources	1980 Resources	Services	Research	Health Professions Development
Bureau of Medical Services					
Program to Keep Children Healthy and Promote Early Diagnosis of Child Health Problems	$ 1,819,820	$ 2,100,020	●		
Sexuality: Counseling on Prenatal and Postpartum Care (with IHS)	29,800	b	●		
Indian Health Service					
Clinical Services and Preventive Health	7,390,603	7,500,000	●		
Office of International Health Affairs					
Study in Egypt of the Detection and Treatment of Inborn Errors of Metabolism which Impair Mental Development (with the Office of International Health, OASH)	a	a		●	
Study in Egypt of Perinatal Screening of Developmental Malformations	a	a		●	
Study of Lactose Intolerance in Egypt (with the Office of International Health, OASH)	a	a		●	
Neonatal Care Study in Egypt (with the Office of International Health, OASH)	a	a		●	
Study of the Effectiveness of Genetic Counseling in Poland (with the Office of International Health, OASH)	a	a		●	
Study in Poland of the Cost-Benefit, Medical, and Sociological Aspects of Prenatal Diagnosis (with the Office of International Health, OASH)	a	a		●	
Study in Yugoslavia of Low Birth Weight and Maturity in Child Development (with the Office of International Health, OASH)	a	a		●	

		1979 Resources	1980 Resources	Services	Research	Health Professions Development
National Institutes of Health	**Division of Research Resources**					
	Pregnancy and Infant Care Research	$ 2,438,958	$ 2,811,080	●		
	National Institute of Child Health and Human Development					
	Mental Retardation	16,122,000	15,192,000		●	
	Sudden Infant Death Syndrome	4,912,000	2,704,000		●	
	Epidemiology and Biometry	636,000	696,000		●	
	Social Learning	1,924,000	1,803,000		●	
	Nutrition	9,624,000	9,526,000		●	
	High Risk Pregnancy	8,315,000	8,646,000		●	
	Fetal Pathology	6,360,000	5,626,000		●	
	Prematurity	3,415,000	3,040,000		●	
	Disorders of the Newborn	4,750,000	4,337,000		●	
	Congenital Malformations	6,102,000	4,945,000		●	
	Study of Genetic Anomalies in Egypt (with the Office of International Health, OASH)	—	a		●	
Office of the Assistant Secretary for Health	**Office of Adolescent Pregnancy Programs**					
	Community-based Adolescent Pregnancy Programs	740,000	6,450,000	●		
	Office of Health Research, Statistics, and Technology/National Center for Health Services Research					
	A Comparative Study of the Implementation of Child Health Policy	26,843	2,419		●	

	1979 Resources	1980 Resources	Services	Research	Health Professions Development
Obstetrical Practice and Perinatal Outcome	$ 43,920	$ —		●	
Impact of EPSDT on Health Services Utilization	19,616	—		●	
Decision and Policy Analysis for Fetal Monitoring	28,366	2,841		●	
A Study in Policy Activation: The Case of EPSDT	29,221	—		●	
Evaluation of an Alternative Birthing Center	128,388	128,560		●	
Impact Evaluation of Programs for Mothers and Infants	—	30,947		●	
Priorities for Research in MCH Services: A Literature Review	—	36,388		●	
Office of Human Development Services					
Administration for Children, Youth, and Families					
Head Start/Parent Education Program and Parent-Child Centers	—	260,000	●		
Office of Program Coordination and Review					
Services to Expectant Parents (Title XX)	4,919,800	6,746,382	●		
Day Care, Information and Referral (Title XX)	d	d	●		
Program to Keep Children Healthy and Promote Early Diagnosis of Child Health Problems (Title IV-B)	d	d		●	

3. Immunizations

1979 Total $129,421,938
1980 Total $110,507,594

Public Health Service

		1979 Resources	1980 Resources	Services	Research	Health Professions Development
Center for Disease Control	**Bureau of Health Education**					
	Survey and Analysis of Immunization Attitudes and Behaviors	$ 60,300	$ —		●	
	Bureau of State Services					
	Immunization Program: Public Information and Education as Part of All Grant-Support Projects	2,400,000	4,087,000	●		
	Immunization Grant Program	36,000,000	24,532,000	●		
	Dissemination of Information About Immunization Services	400,000	690,000	●		
	Immunization Service Delivery Research	575,000	979,000		●	
Food and Drug Administration	**Bureau of Biologics**					
	Vaccine Testing	10,500,000	11,200,000		●	
Health Services Administration	**Bureau of Community Health Services**					
	Community Health Centers	3,450,000	4,230,000	●		
	Migrant Health	575,000	660,000	●		
	Maternal and Child Health/Crippled Children	32,700,000	32,700,000	●		
	National Health Service Corps	1,250,000	1,470,000	●		
	Bureau of Medical Services					
	Program to Reduce the Incidence of Communicable Disease/Diseases Preventable by Immunization	1,330,670	1,123,400	●		
	Indian Health Service					
	Clinical Services and Preventive Health	7,292,164	7,466,192	●		

		1979 Resources	1980 Resources	Services	Research	Health Professions Development
National Institutes of Health	**Division of Research Resources**					
	Immunizations Research	$ 181,362	$ 209,011		●	
	National Cancer Institute					
	Suppression of Tumorigenesis by Immunization	2,707,000	2,160,000		●	
	National Institute of Allergy and Infectious Diseases					
	Program to Reduce the Incidence of Communicable Disease/Diseases Preventable by Immunization (excluding sexually transmitted diseases)	18,000,442	19,000,991		●	
Office of the Assistant Secretary for Health	**Office of Health Research, Statistics, and Technology/National Center for Health Services Research**					
	Estimating the Costs of Selected Medical Events Related to Administration of Specified Vaccines	—	—		●	
Health Care Financing Administration	**Office of Special Programs/Office of Child Health**			●		
	Immunization Services	d	d			
Office of Human Development Services	**Administration for Children, Youth and Families**			●		
	Head Start/Immunization Services	12,000,000	—			

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4. Sexually Transmitted Diseases

1979 Total $57,958,208
1980 Total $63,027,822

Public Health Service

		1979 Resources	1980 Resources	Services	Research	Health Professions Development
Center for Disease Control	**Bureau of State Services**					
	VD Program: Education in All Grant-Supported Projects on Sexually Transmitted Diseases	$ 7,900,000	$ 6,133,000	●		
	Sexually Transmitted Diseases Grant Program	32,900,000	40,000,000	●		
	Information Dissemination on Sexually Transmitted Diseases Grant Program	185,000	149,000	●		
	Sexually Transmitted Diseases/Clinical and Service Delivery Research	1,600,000	1,197,000		●	
Health Services Administration	**Bureau of Medical Services**					
	Research at Seattle USPHS Hospital	682,912	41,600		●	
	Indian Health Service					
	Clinical Services	6,089,912	6,406,822	●		
National Institutes of Health	**National Cancer Institute**					
	Development of Tests for Herpes Virus	600,000	1,100,000		●	
	National Institute of Allergy and Infectious Diseases					
	Research and Vaccine Development	8,000,384	8,000,400		●	

5. High Blood Pressure Control

1979 Total $23,915,597
1980 Total $33,556,320

Public Health Service

		1979 Resources	1980 Resources	Services	Research	Health Professions Development
Health Services Administration	**Bureau of Community Health Services**					
	Hypertension Grant Program	$ 11,000,000	$ 20,000,000	●		
	Bureau of Medical Services					
	Cooperative Study—San Francisco Public Health Hospital and Johns Hopkins University	e	e		●	
	Cooperative Hypertension Study with Baltimore Hospital and Johns Hopkins University	e	e		●	
National Institutes of Health	**Division of Research Resources**					
	High Blood Pressure Control Research	338,597	390,195		●	
	National Heart, Lung, and Blood Institute					
	National High Blood Pressure Education Program—Support	2,078,000	2,196,548	●		
	Ad Council/Mass Media	343,000	—	●		
	Statewide Demonstration Projects	4,258,000	4,020,547	●		
	Health Education Message Testing	66,000	66,000	●		
	Health Hazard Appraisal	132,000	132,000	●		
	Regimen Compliance	68,000	—	●		
	Hypertension Control—Worksetting	520,000	539,704		●	
	Rural Mining Community Hypertension Control	48,000	—	●		
	Direct Operations and Program Management	852,000	1,000,000	●		
	National High Blood Pressure Education Research Programs—Psychological BP Control Modalities; Regimen Adherence; Stress Reduction	1,212,000	1,780,000		●	

		1979 Resources	1980 Resources	Services	Research	Health Professions Development
National Institutes of Health	**National Heart, Lung, and Blood Institute (continued)**					
	Hypertension Detection and Follow-up Program (NHLBI—National Clinical Trial Component)—Screening of Population and Follow-up Screening of High-Risk Population; Referral to Trial or to Treatment; Counseling for Siblings and Spouses.	$ 3,000,000	$ 3,431,326		•	

6. Toxic Agent Control

1979 Total $188,662,310
1980 Total $230,682,985

Public Health Service

		1979 Resources	1980 Resources	Services	Research	Health Professions Development
Center for Disease Control	**Bureau of Epidemiology**					
	Chronic Disease Investigation	$ 250,000	$ 1,591,000	●	●	
	Bureau of Laboratories and Bureau of Epidemiology					
	Toxic Emergency Response/Assistance to States	1,347,800	1,355,000	●		
	Bureau of State Services					
	Environmental Hazards	376,200	1,564,000	●	●	
Food and Drug Administration	**Bureau of Foods**					
	Food Additives	15,987,000	16,901,000	●	●	
	Chemical Contaminants	12,249,000	13,506,000	●	●	
	Mycotoxins and Other Natural Poisons	3,874,000	4,113,000	●	●	
	Food Service, Shellfish, and Milk Safety	2,416,000	5,779,000	●		
	Cosmetics	2,044,000	1,855,000	●	●	
	Study in Egypt of Poisonous Plants Contaminating Edible Ones and Toxic Substances in Plant Foods (with the Office of International Health, OASH)	a	a			
	Study in Poland of Nine Teratological GRAS Substances (with the Office of International Health, OASH)	a	a		●	
	Tunisian Mycotoxin Survey of Tunisian Foods (with the Office of International Health, OASH)	a	a		●	
	Bureau of Radiological Health					
	Ionizing Radiation—Products and Devices	7,537,000	8,114,000	●	●	
	Ionizing Radiation—Use Control	5,786,000	6,230,000	●	●	

6. Toxic Agent Control (Continued)

		1979 Resources	1980 Resources	Services	Research	Health Professions Development
	Light Radiation	$ 3,815,000	$ 4,181,000	●	●	
	Sonic Radiation	1,272,000	1,393,000	●	●	
	Radio Frequency Microwave	2,618,000	2,805,000	●	●	
	National Center for Toxicological Research					
	Programs to Study the Biological Effects of Potentially Toxic Chemical Substances Found in Man's Environment	14,175,000	21,000,000		●	
Health Services Administration	**Bureau of Community Health Services**					
	Migrant Program: Pesticide Poisoning Prevention	50,000	50,000		●	
	Bureau of Medical Services					
	Emergency Medical Services/Poison Prevention Centers	600,000	—		●	
	Study in India of Role of Arthropods in Transmission of Leprosy (with the Office of International Health, OASH)	a	a		●	
	Indian Health Service					
	Study of Epidemiology, National History and Control of Trachoma in Tunisia (with the Office of International Health, OASH)	a	a		●	
National Institutes of Health	**Division of Research Resources**					
	Toxic Agent Control Research	1,623,310	1,870,985		●	
	National Cancer Institute					
	National Organ Site Program	7,062,000	7,156,000		●	

	1979 Resources	1980 Resources	Services	Research	Health Professions Development
The Carcinogenesis Research Program	$ 29,359,000	$ 32,968,000		●	
Toxicologic Testing Program	21,308,000	39,185,000		●	
Development of Improved Tests to Predict Carcinogenicity	4,504,000	5,438,000		●	
Coordination and Support to Other Federal Agencies	2,489,000	4,816,000		●	
National Heart, Lung, and Blood Institute					
Fibrotic and Immunologic Lung Diseases; SCOR Programs on Hypersensitivity Pneumonitis and Pulmonary Fibrosis	3,016,000	3,058,000		●	
National Institute of Environmental Health Sciences					
Environmental Health Research and Manpower Development Resources	8,047,000	8,169,000	●		
Prediction, Detection, and Assessment of Environmentally Caused Diseases and Disorders	22,311,000	22,667,000		●	
Mechanisms of Environmental Diseases and Disorders	14,546,000	14,918,000		●	

7. Occupational Safety and Health

1979 Total $ 92,963,460
1980 Total $118,349,713

Public Health Service

		1979 Resources	1980 Resources	Services	Research	Health Professions Development
Center for Disease Control	**National Institute for Occupational Safety and Health**					
	Program Support	$ 3,000,000	$ 4,300,000	●		
	Manpower Development and Training	11,400,000	14,100,000			●
	Quality Control and Records Management	4,100,000	5,000,000		●	
	Monitoring and Methods Development Research	6,200,000	7,000,000		●	
	Toxicology and Laboratory Research	7,200,000	8,000,000		●	
	Epidemiological Research—Surveillance and Field Studies	10,400,000	11,607,000		●	
	Behavioral Research	943,000	1,000,000		●	
	Criteria Documentation and Standards Development	10,300,000	10,000,000	●	●	
	Health Hazard Evaluations	2,700,000	6,000,000	●	●	
	Toxic Substances List—Technical Information and Assistance	2,850,000	3,000,000	●	●	
	Safety Research	3,800,000	4,300,000	●	●	
	Other	—	5,100,000	●	●	
	Evaluative Studies in Egypt of Exposure to Cement and Flour Dust (with the Office of International Health, OASH)	a	a		●	
	Studies in India of Infective Pneumoconiosis and Pneumoconiosis due to Mica Dust Inhalation (with the Office of International Health, OASH)	a	a		●	
	Studies in Poland of Several Problems Including Chest Diseases in Coal Miners; Effects of Acute and Chronic Vibration on Health of Workers; Effects of Noise and Heat on the Health of Workers in the Metal Industry	a	a		●	

		1979 Resources	1980 Resources	Services	Research	Health Professions Development
Health Resources Administration	**Bureau of Health Professions**					
	Grants for Preparation of Occupational Health Nurse Practitioners	$ 141,592	$ 142,748			●
	Development (with NIOSH) of Curriculum Content and Practice Including Environmental Factors, Accident Prevention, and Health Screening in the Occupational Setting	d	d	●		
Health Services Administration	**Bureau of Medical Services**					
	Occupational Health Training Programs (Division of Federal Employees Occupational Health (DFEOH))	100,000	100,000	●		
	Workers' Occupational Health Education on Federal Facilities (DFEOH)	1,500,000	1,500,000	●		
	Division of Federal Employee Health Preventive Health Screening Programs (e.g., hearing tests, vision tests)	3,500,000	3,500,000	●		
	Employee Health Units	10,000,000	10,000,000	●		
	Employee Health Maintenance, Exams, and Special Job-Related Exams	2,000,000	2,000,000	●		
National Institutes of Health	**Division of Research Resources**					
	Occupational Safety and Health Research	26,868	30,965		●	
	National Cancer Institute					
	Educational Programs to Reduce Work-Related Cancers	3,826,000	11,892,000	●		
	Program to Reduce Asbestos Exposure	1,000,000	1,000,000	●		

		1979 Resources	1980 Resources	Services	Research	Health Professions Development
	Program to Reduce Radiation Exposure	$ 1,569,000	$ 1,602,000	●		
	Studies to Evaluate Cancer Risk Among Workers	5,696,000	6,500,000		●	
	National Heart, Lung, and Blood Institute					
	Immune and Fibrotic Responses to Occupational Environment	664,000	675,000		●	
Office of the Assistant Secretary for Health	**Office of Disease Prevention and Health Promotion/Office of Health Information, Health Promotion, and Physical Fitness and Sports Medicine**					
	National Conference on Health Promotion Programs in Occupational Settings	47,000	—	●		
	Obtaining from the President's Council on Wage and Price Stability Exémption of Employee Health Promotion Programs From the 7 Percent Wage Guidelines	—	—	●		
	Cosponsorship with Washington Business Group on Health Meetings with Industries to Foster Introduction and/or Strengthening of Evaluation in Employee Health Promotion Programs	—	—		●	
	Evaluation of a Federal Occupationally Based Health Promotion Program	—	—		●	
	Development of Guidelines for Health Education and Health Promotion Programs in Occupational Settings	—	—	●	●	●
	Development of a Set of Common Data Items for Comparative Evaluation of Worksite Health Promotion Programs	—	—	●	●	

1979 Total $16,983,428
1980 Total $21,831,654

Public Health Service

		1979 Resources	1980 Resources	Services	Research	Health Professions Development
Center for Disease Control	**Bureau of State Services**					
	Lead-Based Paint Grant Program	$ 7,475,000	$ 11,250,000	●		
	Lead Poisoning Prevention: Education on Lead Hazards in All Grantee Projects	1,025,000	534,000	●		
Food and Drug Administration	**Bureau of Drugs**					
	Poison Control	729,000	709,000	●		
Health Services Administration	**Bureau of Community Health Services**					
	Maternal and Child Health/Accident Prevention Projects	675,000	675,000	●		
	Indian Health Services					
	Clinical Services and Preventive Health	3,275,363	3,462,380	●		
National Institutes of Health	**National Heart, Lung, and Blood Institute**					
	Rehabilitation and Corrective Surgery Research/ Cardiovascular and Other Circulatory Trauma	3,600,000	5,000,000		●	
Office of the Assistant Secretary for Health	**Office of Health Research, Statistics, and Technology/National Center for Health Services Research**					
	Quantitation of Injury and Critical Illness	89,788	49,826		●	
	EMS Severity Index Research	—	12,128		●	
	Severity Index Conference	—	35,000		●	
	Severity Index Construction: Methods, EMS Applications	114,277	104,320		●	

9. Fluoridation and Dental Health

1979 Total $ 5,554,804
1980 Total $11,785,932

Public Health Service

		1979 Resources	1980 Resources	Services	Research	Health Professions Development
Center for Disease Control	**Bureau of State Services**					
	Fluoridation Program	$ 1,000,000	$ 5,000,000	●		
	Technical Assistance		1,773,000	●		
National Institutes of Health	**Division of Research Resources**					
	Fluoridation Research	50,786	58,512		●	
	National Institute of Dental Research					
	Caries Prevention	2,583,903	2,842,293		●	
	Periodontal Disease Prevention	840,640	924,704		●	
	Cross-Cutting and Other	1,079,475	1,187,423		●	

10. Surveillance and Control of Infectious Diseases

1979 Total $238,267,660
1980 Total $245,082,089

Public Health Service

		1979 Resources	1980 Resources	Services	Research	Health Professions Development
Center for Disease Control	**Bureau of Epidemiology, Bureau of Laboratories, Bureau of State Services**					
	Disease Investigation, Surveillance, and Control	$ 34,282,900	$ 35,660,000	●		
	Bureau of Laboratories					
	Cooperation with India on Evaluation of Serologic Tests for the Epidemiology of Malaria (with the Office of International Health, OASH)	a	a		●	
	Laboratory Improvement	9,925,000	10,100,000		●	
	WHO—Improvement of Laboratories	254,100	95,965		●	
	Bureau of State Services					
	Infectious Diseases/Service Delivery	12,200,000	13,100,000	●		
	Infectious Diseases/Information Dissemination	2,000,000	2,300,000	●		
	Office of International Services					
	Studies in Egypt Directed Toward Prevention and Control of Hepatitis, Including Post-Transfusion Viral Hepatitis (with the Office of International Health, OASH)	d	d		●	
Food and Drug Administration	**Bureau of Biologics**					
	Blood and Blood Products	6,272,000	6,702,000	●		
	Viral and Rickettsial Products	5,070,000	5,399,000	●		
	Bacterial and Allergenic Products	3,531,000	3,773,000	●		
Health Resources Administration	**Bureau of Health Professions**					
	Program to Prepare Epidemiological Nurses to Work in Area of Infectious Disease Control in Acute Care Settings—Wayne State University	87,631	54,971			●

10. Surveillance and Control of Infectious Diseases (Continued)

		1979 Resources	1980 Resources	Services	Research	Health Professions Development
Health Services Administration	**Bureau of Community Health Services**					
	Migrant Program: Sanitation	$ 500,000	$ 500,000	●	●	
	Bureau of Medical Services					
	Research Projects on Infectious Diseases Being Conducted at U.S. Public Health Hospital at San Francisco (including leprosy research)	330,843	208,800		●	
	Indian Health Service					
	Preventive Health and Clinical Services	153,256,793	154,500,000	●		
National Institutes of Health	**Division of Research Resources**					
	Infectious Agent Control	61,826	71,205			●
	Fogarty International Center					
	Studies on Vectors and Agents of Infectious Diseases Prevalent in the Tropics	1,700,000	1,000,000			●
	National Cancer Institute					
	Biological Carcinogenesis	3,873,000	5,507,000			●
	National Eye Institute					
	Study in Egypt of Ecology of Trachoma and Other Eye Infections (with the Office of International Health, OASH)	d	d			●
	National Institute of Allergy and Infectious Diseases					
	Prevention of Vector Transmitted Diseases	4,000,567	5,000,148			●

	1979 Resources	1980 Resources	Services	Research	Health Professions Development
Studies of Epidemiology of Meningitis due to H. Influenzae and Other Bacteria in Egypt (with the Office of International Health, OASH)	d	d		●	
Studies of Bionomics of Anopheline Vectors of Malaria in Egypt (with the Office of International Health, OASH)	d	d		●	
Studies in Egypt Concerned With Various Aspects of Schistosomiasis (with the Office of International Health, OASH)	d	d		●	
Studies in Egypt of Tick Vectors of Disease Agents and Epidemiological Studies of Tickborne Infections (with the Office of International Health, OASH)	d	d		●	

11. Smoking and Health

1979 Total $14,137,975
1980 Total $18,095,992

Public Health Service

		1979 Resources	1980 Resources	Services	Research	Health Professions Development
Alcohol, Drug Abuse, and Mental Health Administration	**National Institute of Drug Abuse**					
	Long-Term Maintenance in Smoking Cessation	$ 64,337	$ —	●		
	The Role of Nicotine and Other Reinforcers in Smoking	66,572	—		●	
	Developing a Safer Cigarette	22,565	—		●	
Center for Disease Control	**Bureau of Health Education**					
	National Interagency Council on Teenage Smoking Project	26,000	—			●
	Smoking and Health Education for Youth	161,300	3,600,000			●
	National Institute for Occupational Safety and Health					
	Smoking and Health Studies	—	800,000			●
Health Services Administration	**Bureau of Medical Services**					
	Geriatric Services	40,977	121,373f	●		
	Patient Education—Division of Hospitals and Clinics and Federal Employee Health	336,000	336,000c	●		
National Institutes of Health	**Division of Research Resources**					
	Smoking Cessation Research	12,983	14,924			●
	National Cancer Institute					
	Smoking Education and Information	1,700,000	3,850,000	●		
	Identification of Harmful Constituents in Tobacco Smoke	2,123,000	1,250,000			●
	Epidemiology to Assess Smoking Risks	2,039,000	3,150,000			●

	1979 Resources	1980 Resources	Services	Research	Health Professions Development
National Heart, Lung, and Blood Institute					
Stanford—Smoking Prevention Education and Smoking Cessation Programs on Individual and Group Levels	$ 700,000	$ 750,000		●	
National Research and Demonstration Center, Baylor College of Medicine—Adult and Adolescent Smoking Cessation and Prevention Programs (Social-Psychological Deterrents in School Project)	1,800,000	1,800,000	●		
National Research and Demonstration Center, Vermont Lung Center—Smoking Cessation in Schools (School Health Education Project)	50,000	—	●		
Identification of Variables Associated with Maintenance of Nonsmoking in Ex-Smokers	—	350,000		●	
National Institute of Child Health and Human Development					
Maternal Smoking and Effects on Fetal Development	942,424			●	
Prevention of Smoking in Childhood	2,199,720			●	
Office of the Assistant Secretary for Health					
Office of Health Research, Statistics, and Technology/ National Center for Health Services Research					
The Benefits and Costs of Anti-Smoking Policies	46,690	31,866		●	
The Potential for Using Taxes to Reduce Smoking	28,987	23,381		●	
Medical Costs of Cigarette Smoking	71,420	57,475		●	

	1979 Resources	1980 Resources	Services	Research	Health Professions Development
Office on Smoking and Health					
Planning Conference on Smoking and Health in Minority Communities	$ 75,000	$ —	●		
National Poster and Essay Contest Involving 7th Grade Students	42,000	37,000	●		
Development of a National Information and Education Program	370,000	432,280	●		
Technical Information Services—Inquiry and Reference, Photocopy, Computer Search and Retrieval Services—and Production and Distribution of Publications	545,000	820,732	●		
1979 *Smoking and Health: A Report of the Surgeon General*	250,000	—		●	
1980 *The Health Consequences of Smoking for Women: A Report of the Surgeon General*	—	150,000		●	
Study to Evaluate the Relative Risks Associated with Varying Levels of Tar, Nicotine, and Carbon Monoxide in Cigarettes	25,000	125,000		●	
Survey of Adult Smoking Rates—Data Collected for OSH and Report(s) Written by National Center for Health Statistics	300,000	395,961		●	
Projects in New Jersey to Demonstrate, at the State Level, the Feasibility of Developing a Comprehensive Antismoking Program in High-Risk Communities	99,000	—	●		

1979 Total $105,057,865
1980 Total $145,288,367

Public Health Service

Alcohol, Drug Abuse, and Mental Health Administration

	1979 Resources	1980 Resources	Services	Research	Health Professions Development
National Institute of Alcohol Abuse and Alcoholism					
Techniques to Reduce Alcohol-Related Accidents	$ 250,000	$ 135,000		●	
ABC Laws	88,000	88,000		●	
Basic Principles	261,000	142,000		●	
Alcohol as a Community Response	74,631	—	●		
Community Culture—A Means of Prevention	105,627	—	●		
Community Alcohol Abuse Prevention Strategies	130,658	168,602	●		
Alcohol Prevention in Small Rural Communities	107,887	116,851	●		
Alcohol Education Curriculum Project	116,655	—	●		
Alcohol, Mass Media, and Public Education	126,699	138,365	●		
Replication Training	24,413	56,543	●		
Field Representatives Training in Prevention	174,239	140,485	●		
University Demonstrations for Students/Parents	143,840	—	●		
Supermarket Publications	62,400	67,200	●		
Alcohol Outlets, Drinking Patterns, and Local Zoning	—	213,820	●		
Impact of Approaches to Primary Alcohol Prevention	87,106	18,215	●		
Prevention, Treatment, and Rehabilitation Program	—	98,329	●		
Youth and Alcohol Prevention	51,216	—	●		
Teen Alcohol Prevention	215,136	—	●		
Prevention Model Replication	400,000	387,030	●		
Evaluation of Model Alcohol Education Project	132,393	199,912	●		
Services for Children Symposium	26,969	3,476	●		

	1979 Resources	1980 Resources	Services	Research	Health Professions Development
Prevention of Alcohol Problems in Predelinquent Youth	$ 121,481	$ 21,399	●		
Minimizing Alcohol Problems by Focus on Youth	161,451	25,624	●		
Westchester County Student Assistance Program	—	111,056	●		
Children of Alcoholic Parents Intervention Strategies	—	134,176	●		
Raising the Legal Drinking Age in Michigan and Maine	—	122,502	●		
Assessing the Impact of Legislation Raising Massachusetts Drinking Age	—	347,235	●		
Alcohol Abuse Education Facilities for Elderly	78,604	—	●		
Fetal Alcohol Syndrome Prevention	177,819	141,605	●		
Identification of National Center for Health Statistics Data Sources for Information Pertaining to Alcohol Consumption	125,000	135,000	●		
Primary Prevention of Alcohol Abuse Among Women	—	229,466	●		
Mayors' Leadership Institute	—	30,386	●		
Public Education Campaign	—	1,246,545	●		
Public Education Campaign Evaluation	—	548,849	●		
California Indian Youth Alcohol Education	175,251	189,241	●		
Native American Peer Alcohol Abuse Prevention	52,510	15,000	●		
Prevention Programs for Reducing Excessive Drinking in Spanish-Speaking Communities	27,515	—	●		
Clearinghouse: Primary Prevention Activities	674,000	674,000	●		

	1979 Resources	1980 Resources	Services	Research	Health Professions Development
National Institute of Drug Abuse					
Impact Study: State Drug Usage Evaluation	$ 115,964	$ 121,388	●		
National Prevention Evaluation Resource Network	98,372	—	●		
Project Pyramid—National Technical Assistance and Resource Sharing Project	1,164,642	1,514,661	●		
Drug Classification/Abuse Liability	213,000	—		●	
Abuse Liability Studies	1,219,000	—		●	
Volunteer-Based Prevention of Youthful Drug Problems	176,904	—	●		
Immigrant Social Service Youth Program	166,841	209,900	●		
Project Info: Drug Abuse Prevention in Youth	118,756	85,413	●		
Channel One Community Development Project	1,271,066	400,000	●		
Nome Community Center Program	138,223	—	●		
Charlotte Primary Drug Prevention Program	114,961	—	●		
Ticada Theater Drug Prevention Program	105,585	73,552	●		
The Alpha Center for Drug Prevention	78,452	79,754	●		
NAPA Experiment in Drug Abuse Prevention	457,404	429,545	●		
Impact of Georgia Drug Abuse Prevention Program	107,662	124,780	●		
Family Counseling Clinic	136,545	145,956	●		
Center for Multicultural Awareness	298,751	361,523	●		
Prevention Services to High-Risk Populations	171,202	214,938	●		
Familial and Social Factors Associated with Drug Use	65,000	—		●	
Research Scientist Development Awards	22,000	—		●	

		1979 Resources	1980 Resources	Services	Research	Health Professions Development
	Psychology of Prevention	$ 43,000	$ —		●	
	Clearinghouse: Primary Prevention Activities	305,000	—	●		
	State Prevention Coordinators	1,409,611	1,700,000	●		
	Prevention Services Program (SPG)	—	3,100,000	●		
	Comparative Evaluation in Egypt of Voluntary Treatment of Opium Dependents (with the Office of International Health, OASH)	a	a		●	
	Study in Yugoslavia of Comprehensive Social-Psychiatric Methods in Alcoholism Treatment (with the Office of International Health, OASH)	a	a		●	
Food and Drug Administration	**Bureau of Drugs**					
	Drug Abuse Treatment Monitoring	2,133,000	1,526,000	●		
	Prescription Drug Labeling	1,592,000	1,872,000	●		
	Human Drugs: Bio-Research Monitoring	7,896,000	7,529,000	●		
	Biopharmaceutics	4,246,000	4,530,000	●		
	Drug Quality Assurance	26,987,000	26,082,000	●		
	New Drug Evaluation	14,996,000	16,258,000	●		
	Drug Efficacy Study Implementation	4,426,000	4,827,000	●		
	Drug Experience and Trend Analysis	2,398,000	2,489,000	●		
	OTC (over the counter) Drug Evaluation	2,666,000	3,445,000	●		
	Prescription Drug Advertising	794,000	830,000	●		
	Drug Listing	d	d	●		
Health Services Administration	**Bureau of Medical Services**					
	Health Education Program (Uniformed Services University of Health Sciences [USUHS])	81,000	945,000	●		

		1979 Resources	1980 Resources	Services	Research	Health Professions Development
	Indian Health Service					
	Clinical Services	$ 8,692,000	$ 13,500,000	●		
National Institutes of Health	**Division of Research Resources**					
	General Research in Alcohol/Drug Misuse	131,493	151,545		●	
	National Institute on Aging					
	Program to Reduce the Inappropriate Use of Drugs in the Elderly	1,050,000	1,100,000		●	
Office of the Assistant Secretary for Health	**Office of Health Research, Statistics, and Technology/National Center for Health Services Research**					
	The Effect of Education on Drug Utilization	52,031	—		●	
	Adequacy and Validity of Data About Acute Poisonings	—	50,719		●	
Office of Human Development Services	**Office of Program Coordination and Review**					
	Alcohol Abuse Prevention Services (Title XX)	14,571,734g	45,634,819g	●		
	Administration on Aging					
	Identification of Factors Affecting Use and Effectiveness of Treatment and Support Services by Elderly Problem Drinkers—Older Americans Act (Title IV-B)	164,204	—		●	
	A Model Drug Education Project for Persons Working With the Elderly (Title IV-C)	10,962	10,962			●

13. Improved Nutrition

1979 Total $407,910,692
1980 Total $480,070,191

Public Health Service

		1979 Resources	1980 Resources	Services	Research	Health Professions Development
Center for Disease Control	**Bureau of Health Education**					
	Diabetes Nutrition Study	$ 297,400	$ 200,000		●	
	Bureau of Smallpox Eradication					
	Nutrition Surveillance	2,700,000	2,385,000	●		
	Bureau of Laboratories					
	Nutrition Applied Research	—	1,015,000		●	
Food and Drug Administration	**Bureau of Foods**					
	Nutrition	4,627,000	5,225,000	●		
	Food Sanitation Control	40,639,000	41,286,000	●		
	Interstate Travel	3,094,000	3,177,000	●		
	Food Service	1,813,000	—	●		
	Food Economics	1,822,000	1,949,000	●		
Health Resources Administration	**Bureau of Health Professions**					
	Development of Independent Study Packages for Residents in Family Practice Programs—to Enhance Their Expertise in Providing Their Patients with Sound Nutritional Care	82,600	—	●		
	Development Grants—Interdisciplinary Training in Nutrition for Health Professions Students	1,500,000	1,500,000			●
	Allied Health Educational Projects in Dietetics	935,000	466,099			●
Health Services Administration	**Bureau of Community Health Services**					
	Enhance General Physical and Emotional Well-Being—Reduce the Incidence of Disorders Related to Malnutrition	6,000,000	7,000,000	●		

	1979 Resources	1980 Resources	Services	Research	Health Professions Development
Indian Health Service					
Clinical Services and Preventive Health	$ 4,655,352	$ 4,892,364	●		
Interoffice Programs					
Nutrition Education and Counseling in Primary Care Programs (IHS, BMS and BCHS)	2,774,000	b	●		
Division of Research Resources					
Improved Nutrition	316,440	364,670		●	
National Cancer Institute					
Information Dissemination—Relationship of Diet and Nutrition in the Etiology of Cancer	412,000	440,000	●		
Nutrition and Cancer—Studies Focusing on Etiologic Factors Related to Nutrition	10,500,000	12,705,000		●	
National Eye Institute					
Enhance General Physical and Emotional Well-Being/Reduce the Incidence of Disorders Related to Malnutrition	613,305	1,065,812		●	
National Heart, Lung, and Blood Institute					
Nutrition Counseling Program at University of Iowa—Effects of Long-Term Counseling on Nutrition and Heart Health	150,000	175,000		●	
Lipid Research Clinic—Nutrition Education for Participants and Families	1,000,000	1,025,000	●	●	

	1979 Resources	1980 Resources	Services	Research	Health Professions Development
National High Blood Pressure Education Program—Plans for National Education Program on Nutrition for Hypertension Patients	$ 200,000	$ 250,000		●	
Heart Health Nutrition Education in Cafeterias, Supermarkets and Vending Machines—Pilot Studies	63,000	25,000	●	●	
Lipid Research Clinics—Screening and Treatment Referral on Hyperlipidemia, Counseling for Siblings and Spouses	1,800,000	1,900,000		●	
Stanford Nutrition Education and Counseling Programs	700,000	700,000	●		
National Research and Demonstration Center, Baylor College of Medicine—Risk Awareness Education for Consumers in Heart Disease and Nutrition	800,000	900,000	●		
National Institute on Aging					
Nutrition Research and Prevention	1,159,000	1,100,000		●	
Enhance General Physical and Emotional Well-Being/Reduce the Incidence of Disorders Related to Malnutrition	110,200	207,000		●	
Clinical Nutrition Research	220,000	312,000		●	
National Institute of Arthritis, Metabolism, and Digestive Diseases					
Kidney, Urologic, and Blood Disease	2,142,844	1,447,385		●	
Diabetes, Endocrine, and Metabolic Disease	1,362,259	643,712		●	
Arthritis, Bone, and Skin Disease Programs	445,193	311,470		●	
Digestive Disease and Nutrition	2,979,918	1,752,653		●	

		1979 Resources	1980 Resources	Services	Research	Health Professions Development
	National Institute of Neurological and Communicative Disorders and Stroke					
	Enhance General Physical and Emotional Well-Being/Reduce the Incidence of Disorders Related to Malnutrition	$ 460,000	$ 510,000		●	
Office of the Assistant Secretary for Health	**Office of Health Research, Statistics, and Technology/National Center for Health Services Research**					
	Screening for Cholesterol—Cost and Effectiveness	—	—		●	
Office of Human Development Services	**Administration for Children, Youth, and Families**					
	Head Start Nutrition Program	40,000,000	40,000,000	●		
	Administration on Aging					
	Nutrition Programs (Title III-C)	254,546	320,000,000	●		
	Nutritional Care Services for Elderly Subscribers Provided by HMOs (Title IV-B)	34,048	—	●		
	Analysis of Food Service Delivery Systems Used in Providing Nutrition Services to the Elderly	411,062	—	●		
	Technical Assistance and Training for the Aging Organizations in Management of Nutrition Services	—	185,000			●
	Office of Program Coordination and Review					
	Home Delivery and Congregate Meals (Title XX)	16,546,071	24,955,026g	●		

14. Physical Fitness and Exercise

1979 Total $4,181,643
1980 Total $4,521,036

Public Health Service

		1979 Resources	1980 Resources	Services	Research	Health Professions Development
National Institutes of Health	**Division of Research Resources**					
	Exercise and Fitness	$ 75,523	$ 87,036		●	
	National Heart, Lung, and Blood Institute					
	Stanford Heart Disease Prevention Program	300,000	300,000		●	
	Exercise, Risk Reduction, and Heart Disease	900,000	900,000		●	
	National Institute on Aging					
	Exercise and Aging; Exercise and Normal Aging Changes	272,000	260,000		●	
	Prevention of Loss of Body Function	1,570,200	2,374,000		●	
Office of the Assistant Secretary for Health	**President's Council on Physical Fitness and Sports**					
	Technical Assistance Services—e.g., Federal Employee Health/Fitness Programs, Blue Cross-Blue Shield, Union and Company Fitness Programs and Professional Societies	24,000	32,000	●		
	Information Diffusion—Development and Distribution of Public and Professional Educational Materials, Bibliographic Services with the National Library of Medicine, Medical Symposia, and Research Seminars	60,000	60,000	●		
	National Conference on Physical Fitness and Sports for All	90,000	—	●		
	Public Service Information Programs—TV, Radio, and Public Advertising Campaigns	160,000	170,000	●		

		1979 Resources	1980 Resources	Services	Research	Health Professions Development
	Physical Fitness Opportunities—Work with Industries and Voluntary Groups to Promote Sports and Fitness Projects, e.g., Presidential Sports Award, Competition and Development Projects, "State Champion" Schools, and Certification of Demonstration Center Schools	$ 29,000	$ 17,000	●		
	Leadership Training—4,500 Persons Trained in Regional Clinics in 1979	40,000	21,000	●		
	Technical Assistance to Governors' Councils on Physical Fitness and Sports	—	—	●		
	Program Management Support	635,000	300,000	●		
Office of Human Development Services	**Administration on Aging**					
	Yoga and Relaxation—Meditation as Preventive Health Care for Older Persons (Title IV-B)	25,920	—	●		

1979 Total $7,538,812
1980 Total $6,284,491

Public Health Service

Alcohol, Drug Abuse, and Mental Health Administration

	1979 Resources	1980 Resources	Services	Research	Health Professions Development
National Institute for Mental Health					
Foster Children: A Crisis Intervention Evaluation	$ 136,010	$ —		●	
Effects of Spousal Illness and Death in Older Families	306,301	310,357		●	
Stress and Families: Changing Sex Roles and Mental Health Services	300,179	—		●	
Study on Processes by Which Stress in Marital Relationships is Related to Psychosomatic Complaints During Pregnancy and Subsequent Disruption of the Parenting Process	46,835	—		●	
Crisis Counseling with Divorce	23,214	—		●	
Mental Illness and Divorce	106,641	128,716		●	
Studies of Stress-Resistant Children and Adults	181,885	—		●	
Psychological Stress and High-Risk Pregnancy	6,793	—		●	
Effects of Psychological Stress on Respiration	6,824	—		●	
Stress and Personality Interactions in Health and Illness	50,993	50,293		●	
Psychological Reactions to Uncontrollable Life Events	14,421	—		●	
Study of the Process of Neurotic Responses to Stress	185,987	—		●	
Study on the Effectiveness of Social Support Relationships in Reducing the Negative Physical and Psychological Impact of Job Loss	50,102	67,324		●	
Social Origins of Stress	133,598	260,000		●	
Study on the Transition of Rural Youth From Adolescence to Adulthood	85,013	—		●	

		1979 Resources	1980 Resources	Services	Research	Health Professions Development
	Adaptation and Stress Among Vietnamese Refugees	$ 65,750	$ 57,745		●	
	The Economy as Stressor of Metropolitan Populations	145,253	159,445		●	
	Family Coping Following Job Loss	91,551	67,324		●	
	Private and Social Response to Job Loss: A Metrostudy	96,846	14,984		●	
	Life Changes and Illness: A Multicultural Approach	146,894	—		●	
	Stress Inoculation and Adherence to Health Decisions	63,359	66,179		●	
	Coping with Long-Range Stress of Trauma and Migration	8,693	—		●	
	Stressful Life Events Rating Problems in Epidemiology	13,000	15,473		●	
Health Resources Administration	**Bureau of Health Professions**					
	Supportive Care by Nurses for Children Hospitalized for Major Surgery	50,280	—		●	
	Dealing with Stress of Both Patients and Nurses in Intensive Care Units	146,311	—			●
National Institutes of Health	**Division of Research Resources**					
	General Research in Stress Control	72,714	83,758		●	
	National Heart, Lung, and Blood Institute					
	National Research and Demonstration (in cardiovascular disease)	400,000	700,000	●		
	Type A-B Behavior in Patients	85,000	125,000		●	

		1979 Resources	1980 Resources	Services	Research	Health Professions Development
	National Institute on Aging					
	Societal Research Studies on the Effects of Institutionalization and Relocation	$ 285,000	$ 451,000		●	
	Enhanced General Physical and Emotional Well-Being/to Improve Psychological, Social, and Medical Status of the Elderly	3,670,000	3,136,000		●	
Office of the Assistant Secretary for Health	**Office of Health Research, Statistics, and Technology/National Center for Health Services Research**					
	Support Systems, Stress, and Primary Health Care	148,377	170,627		●	
	Stress and the Amish Community in Transition	—	24,069		●	
	Human Population Laboratory for Epidemiologic Studies	100,000	—		●	
Office of Human Development Services	**Office of Program Coordination and Review**					
	Mental Health Program (Title XX)	d	d	●		
	Administration on Aging					
	Survival Techniques of Older Americans in Economically Stressful Circumstances (Title IV-B)	28,948	—	●	●	
	Capacity Building and Model Development for the Delivery of Mental Health Services (Title IV-C)	86,040	93,675	●	●	
	Effective Community Intervention for the Elderly (Title IV-B)	—	159,522		●	

		1979 Resources	1980 Resources	Services	Research	Health Professions Development
Office of Human Development Services	**Administration on Aging (continued)**					
	Area Agencies on Aging and the Provision of Mental Health Services for the Elderly (Title IV-B)	$ —	$ 143,000		●	
	A Model Project for Enhancing Meaning of Life for Hispanic Elders (Title IV-C)	200,000	—	●	●	

1979 Total $ 914,299,508
1980 Total $1,169,204,549

Public Health Service

Alcohol, Drug Abuse, and Mental Health Administration

	1979 Resources	1980 Resources	Services	Research	Health Professions Development
National Institute of Mental Health					
Adolescents and Adults at Genetic Risk for Psychosis	$ 442,761	$ —		●	
Studies of Schizophrenic-prone Young Adults	146,036	164,765		●	
Memory Training for the Community Aged	63,319	—		●	
Emergent Self-Help Networks Among Urban Elderly	123,170	—		●	
Factors Regulating Family Environment Interaction	132,068	150,000		●	
Dual Work Families: New Sex Roles or Old	56,176	44,794		●	
Changing Family Behavior and the Organization of Work	6,900	—		●	
Marital Separation and Medical Utilization	55,150	—		●	
Maternal Separation: A Biobehavioral Followup	46,852	—		●	
Therapeutic Infant Development Program	162,845	—		●	
An Infant Mental Health Program	127,153	—		●	
Development and Implementation of a Clinical Infant Research Program	280,000	—		●	
Identifying Preschool Children at Risk	133,821	144,525		●	
Prospective Study of Children of Schizophrenic Parents	340,786	—		●	
Mental Health of Children in Pediatric Care	144,196	—		●	
Adjustment of Children of Schizophrenic Parents	194,065	—		●	
Achievement Place: Phase III—Youth Mental Health	244,000	302,042		●	
Children in Danger: A Prospective Study	47,942	—		●	

16. Cross-Cutting and Other (Continued)

	1979 Resources	1980 Resources	Services	Research	Health Professions Development
Youth Mental Health Project	$ 110,377	$ —		●	
Adolescent Development: Sleeping and Waking Behavior	27,835	28,138		●	
Service Needs of Children at Risk of Schizophrenia	18,607	30,330		●	
Behavioral Study of Children of Schizophrenic Parents	57,405	58,900		●	
Children Vulnerable to Psychopathology	32,400	—		●	
Developmental Processes in Children of Schizophrenic Parents	15,200	—		●	
Children and Families Vulnerable to Mental Disorders	434,105	177,156		●	
Social Work: Special Training Project	56,048	56,048		●	
Primary Prevention Component in Mental Health Training	21,181	22,875		●	
Mental Health Skills for Urban Trade Unionists	106,596	109,139		●	
Preventive Mental Health Training: High-Risk Elderly	35,708	36,210		●	
Child Psychiatry Training: Detection of High Risk	62,584	62,584		●	
Training Program in Management of Stress Response	133,982	134,673		●	
Obesity and Cultural Correlates, a Puerto Rican Case	6,900	—		●	
Epidemiological Analysis of Type A/B Behavior	236,499	168,255		●	
Profile: Black Males at Risk to Low Life Expectancy	131,663	116,002		●	

	1979 Resources	1980 Resources	Services	Research	Health Professions Development
Quality of Work and Mental Health in an Urban Agency	$ 19,172	$ —		●	
Community Action Strategies to Stop Rape	50,723	—		●	
Structurally Induced Social Problems and Mental Health	101,904	—		●	
Analysis of High-Risk Psychophysiological Data	13,177	—		●	
Coping Behavior in Schizophrenia	144,472	—		●	
Neonatal Factors in Serious Mental Disorders	89,733	—		●	
Schizophrenic Offspring from Birth to Adulthood	53,819	65,422		●	
Community Mental Health Centers—50 Percent of Consultation and Education	6,664,000	4,650,000	●		
Parent Training: A Preventive Mental Health Program	95,195	113,115			●
Indigenous Caregiving Networks in Primary Prevention Training	86,717	—			●
Training in Preventive Mental Health Services	84,573	86,414			●
Education/Training: Childhood Primary Prevention for Agencies	59,155	—			●
Under Threat of Mt. St. Helens: A Study of Chronic Family Stress	—	140,000			●
Jobs, Job Search, Social Support and Depression	—	71,343			●
Children at Risk for Affective Disorders	—	78,049			●
Effects of Divorce on Children—Preventive Approaches	—	63,627			●
Primary Prevention in Divorce: A Long-Term Follow-Up	—	64,359			●

	1979 Resources	1980 Resources	Services	Research	Health Professions Development
Plenary Conference of the Risk Research Consortium	$ —	$ 19,487		●	
Parental Mental Illness and Outcome in At-Risk Children	—	151,207		●	
Studies of Persons at Risk for Depressive Disorders	—	45,453		●	
Program Impact on Children of Mentally Ill Mothers	—	198,631		●	
Social Support and Mental Health in a Black Community	—	123,939		●	
Coping Styles of Black Adolescent Families	—	72,960		●	
GAIN Program: Group Activities for Individual Needs	—	149,973		●	
A National Longitudinal Study of Marital Disruption	—	270,049		●	
Evaluation of Families and Divorce Workshop	—	62,739		●	
Voluntary Relocation and Mental Health of the Aged	—	60,000		●	
Patterns of Differential Responsiveness to Stress	—	46,312		●	
Short- and Long-Term Effects of Broken Homes on Children	—	167,088		●	
Sequela of Marital Disruption on Children	—	25,174		●	
Stress, Illness, and Coping in a Rural Connecticut Town	—	29,895		●	
Black Family Mental Health and Teenage Pregnancy	—	260,689		●	
Cognition, Speech, and Vulnerability to Schizophrenia	—	70,600		●	

16. Cross-Cutting and Other (Continued)

	1979 Resources	1980 Resources	Services	Research	Health Professions Development
Caring for Elders and Mental Health of Family Members	$ —	$ 150,000		●	
Social Support, Strains, Well-Being of Divorced Women	—	67,300		●	
Teens and Mental Health: A Prevention Curriculum	—	111,450		●	
Preventing Psychopathology in Children of Divorce	—	62,959		●	
Sex Differences in Morbidity and Health Action	—	149,878		●	
Impact of Mental Illness on Patients' Families	—	15,000		●	
A Longitudinal Study of Schooling and Delinquency	—	135,541		●	
Adjustment of Children of Schizophrenic Parents	—	71,700		●	
Impact of Affectively Ill Parents on Their Children	—	130,248		●	
Can We Predict the Mental Health of Young Black Males?	—	112,903		●	
Impact of Marital Disruption on Navajo Children	—	120,000		●	
Training in Preventive Approaches in Mental Health	—	137,917		●	
Resources, Stress, and Mental Health of Older Persons	—	321,411		●	
The Social Network as an Alternative Resource	—	118,606		●	
Wives' Employment, Role Demands, and Adjustments	—	17,041		●	
Reliability and Validity of the Divorce Problem Inventory	—	14,974		●	

		1979 Resources	1980 Resources	Services	Research	Health Professions Development
Center for Disease Control	Program Management	$ —	$ 3,851,000	●		
	Bureau of Health Education					
	A Collection of Literature and Program Information in Health Education	174,000	297,000	●		
	CDC Lifestyle Project (Health Hazard Appraisal)	50,000	1,146,000	●		
	American Hospital Association Patient Education Project	300,000	—			
	Self-Care Projects	—	383,000	●		
	School Health Curriculum Project	722,000	1,207,000	●		
	Grant Program to Deter Smoking and Alcohol Use Among Children and Youth (Transferred from Office on Smoking and Health)	—	10,000,000	●		
	Identification of Industrial Needs and Development of Health Education Guidelines for the Health Insurance Consumer	155,000	—	●		
	Other Health Promotion Projects	—	6,667,000	●		
	Bureau of Epidemiology					
	Diabetes Control Demonstration Projects	2,600,000	4,600,000	●		
	Chronic Disease Control Studies/Cancer, Arthritis, and Other Diseases	600,000	909,000		●	
	Bureau of State Services					
	Urban Rat Control Grant Program	10,400,000	14,000,000	●		
	Rat Control Program: Technical Assistance	2,600,000	517,000	●		
	Office of the Center Director					
	Health Incentive Grants (314d)	90,000,000	68,000,000	●		

		1979 Resources	1980 Resources	Services	Research	Health Professions Development
Food and Drug Administration	**Bureau of Veterinary Medicine**					
	Animal Drug Safety and Efficacy	$ 9,065,000	$ 9,135,000	●		
	Animal Feed Safety	4,758,000	4,932,000	●		
	Drug and Chemical Residues in Animal-Derived Foods	2,112,000	2,187,000	●		
	Veterinary Drugs: Bio-Research Monitoring	2,329,000	2,417,000	●		
	Bureau of Medical Devices					
	Premarket Approval Activities	5,336,000	4,809,000	●		
	Monitoring and Quality Assurance	18,932,000	19,519,000	●		
	Standards Activities	3,770,000	4,189,000	●		
	Investigational Device Exemptions	4,106,000	6,693,000	●		
	Bureau of Biologics					
	Biologics Safety, Efficacy, and Labeling Review	923,000	953,000	●		
	Biologics: Bio-Research Monitoring	5,071,000	5,415,000	●		
	Office of the Commissioner					
	Program Management	39,893,000	40,303,000	●		
	Buildings and Facilities	4,372,000	4,372,000	●		
Health Resources Administration	**Bureau of Health Professions**					
	Develop, Implement, and Evaluate Learning Modules to Teach Communication and Patient Education Skills to Physicians in Primary Care—University of Wisconsin	78,480	—	●		

	1979 Resources	1980 Resources	Services	Research	Health Professions Development
Develop Curricular Modules in Occupational, Industrial, and Environmental Medicine for Integration into Primary Care Training Programs	$ 410,470	$ —	●		
Research to Develop an Electronic Monitoring Device for Paralyzed Patients on Bladder Control	174,431	—		●	
Experimental Program on Recovery and Rehabilitation from Heart Attacks	267,042	—		●	
Research on Relationship of Maternal Anxiety and Physiological Measurements	103,482	—		●	
Curriculum Development Grants to Develop Instructional Materials to Assist Medical Students in Protecting Consumers from Exposure to Environmental Factors, with Focus on Preventive Medicine	977,234	—			●
Preparation of Teaching Tools for the Education of Children in Relation to Nutrition, Immunizations, Exercise, etc.	146,831	—	●		
Publication of Phase II of Longitudinal Study of Nurse Practitioners, Focusing on Employment of NPs and Their Impact on Health Delivery	6,730	—	●		
Study on Role Delineation for Entry-Level Health Educators, Including Aspects of Prevention	204,450	—		●	
Research/Data Contracts on Institutional Information About Schools of Public Health, Where Training Includes Prevention (e.g., data on students, faculty, graduates)	359,682	98,122		●	

	1979 Resources	1980 Resources	Services	Research	Health Professions Development
Verification and Refinement of Role Delineation for Entry-Level Health Educators, Including Aspects of Prevention	$ —	$ 239,292			●
Public Health Traineeships with Focus on Prevention	2,500,000	2,500,000			●
Public Health Special Projects with Focus on Prevention	1,700,000	2,800,000			●
Develop, Implement, Evaluate and Disseminate a Self-Learning Program in Alcohol and Alcohol Abuse	—	126,487			●
Evaluation of P.L. 94-484, Sec. 788(d) Grants for Curriculum Development in Nutrition, Geriatrics, and Environmental Health	—	65,034			●
Development of Master's Level Course in Nursing for Care of Individuals in Correctional Communities	—	290,754			●
Bureau of Health Planning					
Variety of Activities Carried Out by the State and Local Health Planning Agencies (see discussion under Agency Innovations section)	d	d	●	●	●
Office of International Affairs					
Study of Health-Related Beliefs of Urban Egyptian Children with View Toward Developing Effective Health Education Programs (with the Office of International Health, OASH)	a	a		●	

		1979 Resources	1980 Resources	Services	Research	Health Professions Development
	Office of Planning, Evaluation and Legislation					
	Development of National Guidelines for Health Planning—Component of Health Planning Goals Focuses on Disease Prevention and Health Promotion	$ d	$ d	●	●	
Health Services Administration	**Bureau of Community Health Services**					
	Community Health Centers/Dental	1,750,000	2,170,000	●		
	Migrant Health/Dental	575,000	660,000	●		
	Maternal and Child Health/Crippled Children/Dental	3,600,000	3,600,000	●		
	National Health Service Corps/Dental	1,250,000	1,470,000	●		
	Hearing and Vision Services	24,775,000	24,265,000	●		
	Bureau of Medical Services					
	Program to Reduce the Incidence and Promote Early Diagnosis of Chronic Disease	16,105,360	b	●		
	Program to Reduce the Prevalence of Mental Health Problems and Substance Abuse	3,864,000	b	●		
	Primary Mental Health Counseling and Treatment Program	1,159,000	b	●		
	Dental Services	12,516	13,639	●		
	Indian Health Service					
	Primary Mental Health Counseling and Treatment Program	6,200,000	6,571,000	●		
	Clinical Services/Dental	14,431,000	15,595,000	●		

	1979 Resources	1980 Resources	Services	Research	Health Professions Development
Interoffice Programs					
Education in Primary Services (BCHS, BMS)	$ b	$ b	●		
Health Education and Counseling in All Primary Care Programs (BCHS, BMS, IHS)	47,318,828	b	●		
Coping/Stress Management: Primary Mental Health Counseling (BMS, IHS)	3,000,000	b	●		
Division of Research Resources					
General Research on Cross-Cutting Issues	714,060	823,002		●	
Fogarty International Center					
International Research Fellowships (post-doctoral)	250,000	250,000			●
National Cancer Institute					
Cancer Centers Program	3,670,000	3,700,000	●		
Epidemiology to Identify Groups at High Risk of Cancer	14,794,000	16,569,000		●	
Training of Research Personnel	6,174,500	8,337,000			●
Tumor Biology Program	4,080,000	5,400,000		●	
Biochemical Hazard Construction	8,214,000	3,087,000	●		
International Cancer Research Data Bank	175,000	360,000	●		
National Eye Institute					
Cataract	624,607	878,451		●	
Glaucoma	530,655	503,684		●	
Sensory and Motor Disorders of Vision	416,613	448,296		●	
Retinal and Choroidal Diseases	4,361,972	5,320,951		●	
Corneal Diseases	695,640	834,842		●	

National Institutes of Health

	1979 Resources	1980 Resources	Services	Research	Health Professions Development
National Heart, Lung, and Blood Institute					
Community Education Project 5 Communities—Risk Factor Awareness, Education and Treatment Study at Stanford University	$ 2,000,000	$ 2,100,000	●		
Multiple Risk Factor Intervention Trial. Heart Health Nutrition Education and Counseling Programs—Individual and Group Based. Family Assistance Also Provided	4,200,000	4,250,000		●	
Multiple Risk Factor Intervention Trial (NHLBI)—Screening and Treatment Referral on Hypertension, Cholesterol, Weight and Smoking; Counseling for Siblings and Spouses	1,700,000	1,750,000		●	
Multiple Risk Factor Intervention Trial—Use of Stress Management Techniques for Nutrition and Smoking Counseling	400,000	750,000		●	
Hemophilia and Sickle Cell Disease Prevention Research	1,960,000	1,960,000		●	
Coronary Primary Prevention Trial (CPPT)—Medication Compliance Program	345,000	350,000		●	
Diabetes and Cardiac Function	600,000	675,000		●	
Risk Factor Identification—Role of Trace Metals in Congenital Blood Disorders	310,000	310,000		●	
National Institute on Aging					
Program to Reduce Functional Disability in the Elderly	400,000	900,000		●	

	1979 Resources	1980 Resources	Services	Research	Health Professions Development
Risk Assessment of the Effects of Social, Psychological, and Demographic Changes in Aged Populations	$ 1,344,000	$ 1,500,000		●	
National Institute of Arthritis, Metabolism, and Digestive Diseases					
Intramural Projects Related to Primary Prevention	665,000	b		●	
Contracts Related to Primary Prevention	345,404	261,412		●	
National Institute of Dental Research					
Dental Research/Applied	3,699,895	—		●	
Studies of Pain Control and Fear of Dental Pain (rest and relaxation)	111,261	—		●	
National Institute of Dental Research Studies/ Basic Science	3,811,156	—		●	
National Institute of General Medical Sciences					
Research to Prevent Chromosomal Abnormalities and General Genetic Diseases	849,700	1,141,000		●	
Research to Prevent Metabolic Disorders	68,591	35,535		●	
National Institute of Neurological and Communicative Disorders and Stroke					
Research to Prevent Neurological Disorders and Stroke/Basic Research, Screening, and Epidemiology	14,000,000	15,960,000		●	

	1979 Resources	1980 Resources	Services	Research	Health Professions Development
Research to Prevent Neurological and Communicative Disorders and Stroke/Enzyme Metabolism Abnormalities	$ 3,300,000	$ 3,762,000		●	
Stroke and Trauma Program	1,800,000	2,052,000		●	
Fundamental Neurosciences Program	6,400,000	7,296,000		●	
Neurological Disorders Program	5,700,000	6,498,000		●	
Communicative Disorders Program	5,500,000	6,270,000		●	
Protection of Vision and Hearing	2,350,000	2,679,000		●	
Intramural Research Program	5,200,000	5,928,000		●	
Inter-Institute Programs					
Scientific Conferences to Evaluate Recent Research Results Related to Preventive Medicine (FIC and other BIDs)	200,000	200,000	●		
Senior International Fellowships for Research Related to Preventive Medicine (FIC and NIAID)	110,000	110,000		●	
Office of the Assistant Secretary for Health					
Office of Disease Prevention and Health Promotion/Office of Health Information, Health Promotion, and Physical Fitness and Sports Medicine					
National Health Information Clearinghouse	375,938	373,000	●		
Conference in Atlanta, Georgia, to Develop Objectives in Accord with Surgeon General's Report	d	—	●		
Technical Assistance to Community Health Promotion Programs	139,609	—	●		

	1979 Resources	1980 Resources	Services	Research	Health Professions Development
National Health Promotion Media Campaign—					
Meeting to Define Ways to Use Broadcast Media to Promote Health	$ 200,000	$ 143,000	●		
Regional Forums on Community Health Promotion	10,000	1,500	●		
Meetings to Coordinate Studies of Health Risk Assessment	d	d	●		
Meeting to Explore Development of Self-Scoring Health Test	6,750	d	●		
Collaboration with Bureau of Health Education on Evaluation of School Health Activities	d	d		●	
National Conference on Promoting Health in the Schools	—	74,000	●		
Demonstration Project Related to Health Promotion Services in HMOs	—	130,626	●		
Survey of Health Habits—Conducted Through the National Center for Health Statistics	117,000	70,000		●	
Health Message Testing Service—Participation in NCI and NHLBI Program	50,000	68,000		●	
Office of Health Research, Statistics, and Technology/National Center for Health Services Research					
Systematic Health Intervention—Disadvantaged Groups	—	—		●	
Increasing Healthy Behavior: A New Technique	16,378	—		●	
Description, Analysis, and Assessment of Health Hazard/Health Risk Appraisal Programs	151,514	—		●	

	1979 Resources	1980 Resources	Services	Research	Health Professions Development
Case Studies of Health Promotion and Disease Prevention in the Workplace	$ 203,460	$ —		●	
Synthesis and Dissemination of Research Findings on Health Promotion and Disease Prevention Intervention Strategies	189,589	—		●	
Collaborative Study with India of Systems Analysis Approach for the Delivery of Primary Health Care (with the Office of International Health, OASH)	a	a			
Evaluation of Breast Cancer Detection Strategies	78,398	68,177		●	
Self Care: Practices and Attitudes in the United States	—	75,138		●	
Quantitative Measurement of Quality of Medical Care—Sentinel Health Events	59,562	—			
Holistic Health Center Orientations and Characteristics	9,166	—			
A Study in Policy Activation: The Case for Early and Periodic Screening, Diagnosis, and Treatment (EPSDT)	29,221	—		●	
Common Sense—Common Health Evaluation	1,347	—		●	
Office of Population Affairs					
Immunization and Family Planning	4,000	4,000	●		
Pregnancy and Family Planning	1,000	1,000	●		
STD and Family Planning	2,000	2,000	●		

		1979 Resources	1980 Resources	Services	Research	Health Professions Development
Health Care Financing Administration	**Office of Special Programs**					
	Early Periodic Screening, Diagnosis, and Treatment Program (EPSDT)	$ 49,000,000	$ 52,851,388	●		
	Office of Research, Demonstrations, and Statistics					
	Demonstration Projects to Improve Psychological, Social, and Medical Status of the Elderly	d	344,489	●		
Office of Human Development Services	**Administration on Aging**					
	Community-Based Comprehensive Care for the Elderly (Title IV-C)	193,802	193,802	●		
	Promoting Wellness of the At-Risk Elderly and Their Families in Service Demonstration Project (Title IV-C)	137,763	141,263	●		
	Senior Health Services Project (TItle IV-C)	190,621	190,621	●		
	Providing a Missing Link in the Chain of National Support (Title IV-C)	112,593	112,553	●		
	Services to Homebound Elderly (Title IV-C)	90,003	—	●		
	Senior Center Care System (TItle IV-C)	171,894	165,048	●		
	Identifying and Enhancing the Natural Support Systems of the Noninstitutionalized Rural Elderly (Title IV-C)	89,550	89,550	●		
	Health Education and Social Service/Primary Care Coordination Demonstration Project for a Rural Area (Title IV-C)	100,000	50,000	●		
	Demonstration Project on Elderly Abuse (Title IV-C)	—	125,000	●		

	1979 Resources	1980 Resources	Services	Research	Health Professions Development
Training, Research, and Discretionary Projects (Title IV-A)	$ 3,709,699	$ 4,460,586		●	●
Training, Research, and Discretionary Projects (Title IV-E)	—	160,000		●	●
Administration on Aging/Health Services—Administration Demonstration Projects (Title IV-421)	836,000	425,321	●		
Older Americans Health Fair Project of Health Screening and Health Education (Title IV-421)	451,213	—	●		
Administration for Children, Youth and Families					
Eleven Demonstrations of Community Action to Prevent Child Abuse and Neglect	936,000	—		●	
Five Demonstrations of Child Protective Agency Management of Self-Referrals	300,000	—		●	
Intensive Supportive Services to Prevent Separation of Families-at-Risk	1,190,160	1,200,000		●	
Seven Demonstrations National Research Coordination Contract	145,000	—		●	
Eight Demonstrations to Plan and Initiate Comprehensive Emergency Services Systems	90,000	270,000		●	
To Keep Children Healthy and Promote Early Diagnosis of Child Health Problems/Head Start Screening Programs	11,970,000	12,000,000	●		
National Runaway Switchboard Program, Information and Referral	260,000	260,000	●		
Eight Youth Development Demonstration Grants	600,000	653,606	●		
Teenage Pregnancy and Parenting Program	95,000	95,000	●		

	1979 Resources	1980 Resources	Services	Research	Health Professions Development
Health Provider Committee for Head Start, Information and Referral	$ 24,000	$ —	●		
Health Education for Parents Program, Information and Referral	360,000	—	●		
21 Community-Based Prevention and Treatment Service Improvement Projects	1,980,000	1,980,000	●		
Development of a Statewide Model to Streamline Title XX Systems for Effective Utilization by Runaway Shelters—Ohio Youth Services Network, Columbus, Ohio (with APS)	150,000	150,000	●		
Demonstrations on Prevention of Child Sexual Abuse (six grants)	—	352,216	●		
Five Treatment/Training Institutes for Child Sexual Abuse	—	1,070,000		●	
Office of Policy Development					
Women's Alternative Center: A Residential Treatment Program for Female-Headed Households with Serious Problems, Wawa, Pa.	99,500h 99,943i	64,200	●		
Henry Street (NYC) Residential Treatment Center—For Female-Headed Multi-Problem Families	93,705	93,705	●		
Family Support Center, Yeadon, Pa.—Services to Children Under 4 Years of Age Determined to be at Risk of Child Abuse and/or Neglect	125,000	115,000	●		

16. Cross-Cutting and Other (Continued)

	1979 Resources	1980 Resources	Services	Research	Health Professions Development
Family, Child Resource Center for the Ute Mountain Tribal Council—For Child Care, Foster Placement, Coordinated Human Services on Reservations	$ 104,000	$ —	●		
Model for Social Service Capability in Indian Tribes in North Carolina	120,000	—	●		
Indian Family Structure and Welfare Delivery System in Maine and Massachusetts	110,050	—	●		
Comprehensive Social Service Plan for Standing Rock Sioux Tribes	93,110	—	●		
Sisseton-Wahpeton Sioux Child Protection, Family Support and Placement Demonstration Project	68,916	—	●		
Indian Child Welfare Training and Demonstration Project—Five Tribes, Washington State—Foster and Adoptive Parents, New Statewide Juvenile Code	198,400	—	●		
Demonstration Model for Tribally Controlled and Operated Social Services System in Arizona (18 Tribes)	135,000	—	●		
Michigan Demonstration Model for Indian-Controlled Child Welfare Agency	138,816	—	●		
Office of Program Coordination and Review					
Homemaker, Home Management Services (Title XX)	374,980,278	597,310,688d	●		
Day Care, Information and Referral (Title XX)	d	d	●		
Health Services (Title XX)	—	92,424,682	●		

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